

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington D.C. 20549

Form 10-K

ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended March 31, 2019

Or

.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to .

Commission file number 001-32312

Novelis Inc.

(Exact name of Registrant as specified in its charter)

Canada
(State or other jurisdiction of
incorporation or organization)
3560 Lenox Road, Suite 2000,
Atlanta, GA
(Address of principal executive offices)

98-0442987
(I.R.S. Employer
Identification Number)

30326
(Zip Code)

(404) 760-4000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act of 1933. Yes No ý

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"). Yes ý No

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No ý

The Registrant is a voluntary filer and is not subject to the filing requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934. However, the Registrant has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months.

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the Registrant was required to submit and post such files). Yes ý No

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	-	Accelerated filer	-
Non-accelerated filer	x (Do not check if a smaller reporting company)	Smaller reporting company	-
Emerging growth company	-		

If an emerging growth company, indicate by check mark if the Registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No ý

As of May 7, 2019, the Registrant had 1,000 common shares outstanding. All of the Registrant's outstanding shares were held indirectly by Hindalco Industries Ltd., the Registrant's parent company.

DOCUMENTS INCORPORATED BY REFERENCE: None

TABLE OF CONTENTS

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND MARKET DATA

PART I

Item 1. Business	4
Item 1A. Risk Factors	15
Item 1B. Unresolved Staff Comments	22
Item 2. Properties	22
Item 3. Legal Proceedings	24
Item 4. Mine Safety Disclosures	24

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities	25
Item 6. Selected Financial Data	25
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	26
Item 7A. Quantitative and Qualitative Disclosures About Market Risk	49
Item 8. Financial Statements and Supplementary Data	52
Item 9. Changes In and Disagreements With Accountants On Accounting and Financial Disclosure	125
Item 9A. Controls and Procedures	125
Item 9B. Other Information	125

PART III

Item 10. Directors, Executive Officers and Corporate Governance	126
Item 11. Executive Compensation	131
Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters	145
Item 13. Certain Relationships and Related Transactions and Director Independence	146
Item 14. Principal Accountant Fees and Services	147

PART IV

Item 15. Exhibits and Financial Statement Schedules	148
Item 16. Form 10-K Summary	153

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND MARKET DATA

This document contains forward-looking statements that are based on current expectations, estimates, forecasts and projections about the industry in which we operate, and beliefs and assumptions made by our management. Such statements include, in particular, statements about our plans, strategies and prospects under the headings “Item 1. Business,” “Item 1A. Risk Factors” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Words such as “expect,” “anticipate,” “intend,” “plan,” “believe,” “seek,” “estimate” and variations of such words and similar expressions are intended to identify such forward-looking statements. Examples of forward-looking statements in this Annual Report on Form 10-K include, but are not limited to, our expectations with respect to the impact of metal price movements on our financial performance; the effectiveness of our hedging programs and controls; and our future borrowing availability. These statements are based on beliefs and assumptions of Novelis’ management, which in turn are based on currently available information. These statements are not guarantees of future performance and involve assumptions and risks and uncertainties that are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed, implied or forecasted in such forward-looking statements. We do not intend, and we disclaim any obligation, to update any forward-looking statements, whether as a result of new information, future events or otherwise.

This document also contains information concerning our markets and products generally, which is forward-looking in nature and is based on a variety of assumptions regarding the ways in which these markets and product categories will develop. These assumptions have been derived from information currently available to us and to the third party industry analysts quoted herein. This information includes product shipments. Actual market results may differ from those predicted. We do not know what impact any of these differences may have on our business, our results of operations, financial condition, and cash flow. For a discussion of some of the specific factors that may cause Novelis’ actual results to differ materially from those projected in any forward-looking statements, see the following sections of this report: “Part I. Item 1A. Risk Factors”, “Part II. Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Part II. Item 7. Critical Accounting Policies and Estimates.”

In this Annual Report on Form 10-K (Form 10-K), unless otherwise specified, the terms “we,” “our,” “us,” “Company,” and “Novelis” refer to Novelis Inc., a company incorporated in Canada under the Canadian Business Corporations Act, and its subsidiaries. References herein to “Hindalco” refer to Hindalco Industries Limited, which acquired Novelis in May 2007. Unless otherwise specified, the period referenced is the current fiscal year.

Exchange Rate Data

We report our financial statements in United States (U.S.) dollars. The following table sets forth exchange rate information expressed in terms of Canadian dollars per U.S. dollar based on exchange data published daily from Citibank as of 16:00 Greenwich Mean Time (GMT) (11:00 A.M. Eastern Standard Time). The rates set forth below may differ from the actual rates used in our accounting processes and in the preparation of our consolidated financial statements.

Period	At Period End	Average Rate (A)	High	Low
Year Ended March 31, 2015	1.2666	1.1467	1.2681	1.0665
Year Ended March 31, 2016	1.2978	1.3115	1.4015	1.2065
Year Ended March 31, 2017	1.3289	1.3137	1.3439	1.2542
Year Ended March 31, 2018	1.2889	1.2826	1.3667	1.2305
Year Ended March 31, 2019	1.3360	1.3141	1.3657	1.2824

(A) This represents the average of the 16:00 GMT buying rates on the last day of each month during the period.

All dollar figures herein are in U.S. dollars unless otherwise indicated.

Commonly Referenced Data

As used in this Form 10-K, consolidated “aluminum rolled product shipments,” “flat rolled product shipments,” or “shipments” refers to aluminum rolled product shipments to third parties. “Aluminum rolled product shipments,” “flat rolled product shipments,” or “shipments” associated with the regions refers to aluminum rolled product shipments to third parties and intersegment shipments to other Novelis regions. Shipment amounts also include tolling shipments. References to “total shipments” include aluminum rolled product shipments as well as certain other non-rolled product shipments, primarily scrap, used beverage cans (UBCs), ingots, billets, and primary remelt. The term “aluminum rolled products” is synonymous with the terms “flat rolled products” and “FRP” which are commonly used by manufacturers and third party analysts in our industry. All tonnages are stated in metric tonnes. One metric tonne is equivalent to 2,204.6 pounds. One kilotonne (kt) is 1,000 metric tonnes.

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat rolled products have a price structure with three components: (i) a base aluminum price quoted off the London Metal Exchange (LME); (ii) a local market premium (LMP); and (iii) a “conversion premium” to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. The use of the term “conversion premium” in this Form 10-K, refers to the conversion costs plus a margin we charge our customers to produce the rolled product which reflects, among other factors, the competitive market conditions for that product, exclusive of the pass through aluminum price.

PART I

Item 1. Business

Overview

Novelis is the leading producer of flat rolled aluminum products and the world's largest recycler of aluminum. We work alongside our customers to provide innovative solutions to the beverage can, automotive and high-end specialty markets. Operating an integrated network of technically advanced rolling and recycling facilities across North America, South America, Europe and Asia, Novelis leverages its global manufacturing and recycling footprint to consistently deliver high-quality products around the world. In fiscal year 2019, we had shipment volumes of 3,419 kt and "Net sales" of \$12,326 million for the year ended March 31, 2019.

Our History

Organization and Description of Business

Novelis was formed in Canada on September 21, 2004. On May 15, 2007, Novelis was acquired by Hindalco. All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco. We produce flat rolled aluminum products and provide innovative solutions to the beverage can, automotive and high-end specialty markets. As of March 31, 2019, we had manufacturing operations in ten countries on four continents: North America, South America, Europe and Asia, through 23 operating facilities, including recycling operations in twelve of these plants.

Our Industry

The aluminum rolled products market represents the global supply of, and demand for, aluminum sheet, plate and foil produced either from sheet ingot or continuously cast roll-stock in rolling mills operated by both independent aluminum rolled products producers and integrated aluminum companies.

Aluminum rolled products are semi-finished aluminum products that constitute the raw material for the manufacture of finished goods ranging from automotive structures and body panels to food and beverage cans. There are two major types of manufacturing processes for aluminum rolled products differing mainly in the process used to achieve the initial stage of processing:

- *hot mills* — which require sheet ingot, a rectangular slab of aluminum, as starter material; and
- *continuous casting mills* — which can convert molten metal directly into semi-finished sheet.

Both processes require subsequent rolling, which we refer to as cold rolling, and finishing steps such as annealing, coating, leveling or slitting to achieve the desired thickness, width and metal properties. Most customers receive shipments in the form of aluminum coil, a large roll of metal, which can be utilized in their fabrication processes.

Industry Sources of Metal

There are two sources of input material: (1) recycled aluminum, produced by remelting post-industrial and post-consumer scraps; and (2) primary aluminum, produced from alumina (extracted from bauxite), processed in a smelter.

Primary aluminum and sheet ingot can generally be purchased at prices set on the LME, plus a local market premium that varies by geographic region of delivery, alloying material, form (ingot or molten metal) and purity.

Recycled aluminum is generally purchased at a discount compared to the price of primary aluminum depending on type and quality of the scrap, geographic region, and other market factors.

Industry End-use Markets

Aluminum rolled products companies produce and sell a wide range of products, which can be grouped into five end-use markets: (1) packaging; (2) transportation; (3) architectural; (4) industrial; and (5) consumer durables and other. Within each end-use market, aluminum rolled products are manufactured with a variety of alloy mixtures; a range of tempers (hardness), gauges (thickness) and widths; and various coatings and finishes. Large customers typically have customized needs that require close working relationships, including technical development and support with their supplying mills.

Aluminum has a wide variety of uses in end-use markets because of its lightweight, recyclability and formability properties. The recyclability of aluminum enables it to be used, collected, melted and returned to the original product form an unlimited number of times, unlike paper and polyethylene terephthalate (PET) plastic, which deteriorate with every iteration of recycling.

Packaging. Aluminum is used in beverage cans and bottles, food cans, beverage screw caps and foil, among others. Packaging is the largest aluminum rolled products application, according to market data from Commodity Research Unit International Limited (CRU), an independent business analysis and consultancy group. Beverage cans are one of the largest aluminum rolled products applications. In addition to their recyclability, aluminum beverage cans offer advantages in fabricating efficiency and product shelf life. Fabricators are able to produce and fill beverage cans at very high speeds, and non-porous aluminum cans provide longer shelf life than PET plastic containers. Additionally, the use of aluminum to package beverages such as craft beer is increasing, as aluminum blocks sunlight and therefore maintains the quality and taste of the product longer. Aluminum cans are light, stackable and use space efficiently, making them convenient and cost-efficient to ship.

Beverage can sheet is sold in coil form for the production of can bodies, ends and tabs. The material can be ordered as rolled, degreased, pre-lubricated, pre-treated and/or lacquered. Typically, can makers define their own specifications for material to be delivered in terms of alloy, gauge, width and surface finish.

Foil wrap or packaging foil is another packaging application and it includes household and institutional aluminum foil. Container foil is used to produce semi-rigid containers such as pie plates and take-out food trays.

Transportation. Aluminum rolled products are used in vehicle structures (also known as "body-in-white") as well as automotive body panel applications, including hoods, doors, deck lids, fenders and lift gates. These uses typically result from cooperative efforts between aluminum rolled products manufacturers and their customers that yield solutions for specific requirements in alloy selection, fabrication procedure, surface quality and joining. There has been recent growth in certain geographic markets in passenger and commercial vehicle applications due to the lighter weight, better fuel economy and improved emissions performance associated with these applications. We expect increased growth in this end-use market driven by government regulations requiring improved emissions and better fuel economy; while also maintaining or improving vehicle performance and safety.

Heat exchangers, such as radiators, air conditioners, and auto fin material, are an important application for aluminum rolled products in the transportation end-use market. Original equipment manufacturers also use aluminum sheet, with specially treated surfaces and other specific properties, for interior and exterior applications. Newly developed alloys are being used in transportation tanks and rigid containers allowing for safer and more economical transportation of hazardous and corrosive materials.

Aluminum is also used in aerospace applications, as well as in the construction of ships' hulls, superstructures and passenger rail cars because of its strength, light weight, formability and corrosion resistance.

Architectural. Construction is the largest application within this end-use market. Aluminum rolled products developed for the construction industry are often decorative and non-flammable, offer insulating properties, are durable and corrosion resistant, and have a high strength-to-weight ratio. Aluminum siding, gutters, and downspouts comprise a significant amount of construction volume. Other applications include doors, windows, awnings, canopies, facades, roofs and ceilings.

Industrial. Industrial applications include heat exchangers, process and electrical machinery, lighting fixtures, furniture and insulation.

Consumer Durables and Other. Aluminum's lightweight characteristics, high formability, ability to conduct electricity and dissipate heat and its corrosion resistance makes it useful in a wide variety of electronic applications. Uses of aluminum rolled products in electronics include flat screen televisions, personal computers, laptops, mobile devices, and digital music players. Other uses of aluminum rolled products in consumer durables include microwaves, coffee makers, air conditioners and cooking utensils.

Market Structure and Competition

The aluminum rolled products market is highly competitive and is characterized by economies of scale; and significant capital investments are required to achieve and maintain technological capabilities and demanding customer qualification standards. Our primary aluminum competitors are as follows:

North America

Alcoa, Inc. (Alcoa)
Aleris Corporation (Aleris)
Arconic Inc. (Arconic)
Constellium N.V. (Constellium)
Golden Aluminum
Gränges AB
Maaden - Saudi Arabian Mining Company
Shandong Nanshan Aluminum Co., Ltd.
UACJ Corporation/ Tri-Arrows Aluminum Inc. (Tri-Arrows)

Europe

Aleris
Amag Austria Metall AG
Arconic
Constellium
Elval Hellenic Aluminium Industry S.A.
Henan Zhongfu Industrial Co., Ltd.
Norsk Hydro A.S.A.
Shandong Nanshan Aluminum Co., Ltd.

Asia

Arconic
Binzhou Weiqiao Aluminium Science & Technology Co., Ltd.
China Zhongwang Holdings Limited
Chinalco Group
Henan Mingtai Aluminum Industrial Co., Ltd.
Henan Zhongfu Industrial Co., Ltd.
Kobe Steel Ltd. (Kobe)
Shandong Nanshan Aluminum Co., Ltd.
Southwest Aluminum (Group) Co., Ltd.
UACJ Corporation

South America

Arconic
Companhia Brasileira de Alumínio
Hulamin Limited
Norsk Hydro A.S.A.
Shandong Nanshan Aluminum Co., Ltd.

The factors influencing competition vary by region and end-use market, but generally we compete on the basis of our value proposition; which includes price, product quality, the ability to meet customers' specifications, range of products offered, lead times, technical support and customer service. In some end-use markets, competition is also affected by fabricators' requirements that suppliers complete a qualification process to supply their plants. This process can be rigorous and may take many months to complete. As a result, obtaining business from these customers can be a lengthy and expensive process. However, the ability to obtain and maintain these qualifications can represent a competitive advantage.

In addition to competition from others within the aluminum rolled products industry, we also face competition from non-aluminum material producers. In the packaging end-use market (primarily beverage and food cans), aluminum rolled products compete mainly with glass, PET plastic, and in some regions, steel. In the transportation end-use market, aluminum rolled products compete mainly with steel and composites. Aluminum competes with wood, plastic, cement, steel and other materials in building products applications. In the consumer durables end-use market, aluminum rolled products compete mainly with plastic, steel, and magnesium. Additionally, aluminum competes with steel, copper, plastic, glass and other materials in industrial applications. Factors affecting competition with substitute materials include price, ease to manufacture, consumer preference and performance characteristics.

Key Factors Affecting Supply and Demand

The following factors have historically affected the supply of aluminum rolled products:

Production Capacity and Alternative Technology. The addition of rolling capacity requires large capital investments and significant plant construction or expansion, and typically requires long lead-time equipment orders. Advances in technological capabilities allow aluminum rolled products producers to better align product portfolios and supply with industry demand. There are lower cost ways to enter the industry such as continuous casting, which offers the ability to increase capacity in smaller increments than is possible with hot mill additions; however, the continuous casting process results in a more limited range of products.

Trade. Some trade flows occur between regions despite shipping costs, import duties and the lack of localized customer support. Higher value-added products are more likely to be traded internationally, especially if demand in certain markets exceeds local supply. With respect to less technically demanding applications, emerging markets with low cost inputs may export commodity aluminum rolled products to larger, more mature markets, as we have seen with China.

The following factors have historically affected the demand for aluminum rolled products:

Economic Growth. We believe that economic growth is a significant driver of aluminum rolled products demand. In mature markets, growth in demand has typically correlated closely with industrial production growth. In many emerging markets, growth in demand typically exceeds industrial production growth largely because of expanding infrastructures, capital investments and rising incomes that often accompany economic growth in these markets.

Substitution Trends. Manufacturers' willingness to substitute other materials for aluminum in their products and competition from substitution materials suppliers also affect demand. There has been a strong substitution trend toward aluminum in the use of vehicles as automobile manufacturers look for ways to meet fuel efficiency regulations, improve performance and reduce carbon emissions in a cost-efficient manner. As a result of aluminum's durability, strength and light weight, automobile manufacturers are substituting heavier alternatives such as steel and iron with aluminum. Carbon fiber and plastics are other lightweight material options, but their relatively high cost and limited end-of-life recyclability reduce their competitiveness as widespread material substitutes today. Consequently, demand for flat rolled aluminum products has increased. We also see strong substitution trends toward aluminum and away from steel in the beverage can market in certain regions.

Seasonality. During our third fiscal quarter, we typically experience seasonal slowdowns resulting in lower shipment volumes, although this has been less significant as our product portfolio shifts and diversifies. This is a result of declines in overall production output due primarily to holidays and cooler weather in North America and Europe, our two largest operating regions. We also experience downtime at our mills and customers' mills due to scheduled plant maintenance and are impacted to a lesser extent by the seasonal downturn in construction activity.

Sustainability. Growing awareness of environmentalism and demand for recyclable products has increased the demand for aluminum rolled products. Unlike other commonly recycled materials such as paper or PET plastic, aluminum can be infinitely recycled without affecting the quality of the product. Additionally, the recycling process uses approximately 95% less energy than is required to produce primary aluminum from mining and smelting, with an equivalent reduction in greenhouse gas emissions.

Our Business Strategy

Our objective as the world's largest aluminum rolling and recycling company is to lead the aluminum industry as the partner of choice for innovative solutions. We will maximize shareholder value through free cash flow generation and increasing return on capital employed. To achieve these objectives, we will focus on the following areas:

Defend the Core

Novelis is the leading global flat rolled aluminum supplier in the beverage can and automotive markets. We intend to protect our leadership position by continuing to deliver best-in-class customer service with improved quality, service and innovative solutions that differentiate our products. We are committed to producing the best quality products and providing reliable on-time delivery in order to be a true partner in innovation and sustainable supply solutions. We are focused on building and maintaining strong, positive relationships with all of our customers. In fiscal year 2019, we announced plans to establish a global network of Customer Solution Centers to accelerate collaborative innovation between Novelis and automakers to determine how to maximize lightweight, high-strength aluminum for the next generation of vehicle design. The first center is scheduled to open in Novi, Michigan with centers in China and Europe to follow.

In addition, we will maintain a competitive cost structure by managing metal input costs and employing initiatives to improve operational efficiencies across our global network. This includes a commitment to employee safety, product quality and system reliability. As a manufacturing organization, our primary concern is the health and safety of our employees. We are committed to strengthening a culture of safety across all levels of the organization. We are focused on optimizing our manufacturing and recycling operations to increase asset utilization and productivity. We continue to pursue a standardization of our manufacturing processes where possible, while still allowing the flexibility to respond to local market demands.

Utilizing recycled material allows us to diversify our metal supply, helps control metal costs and provides environmental benefits. We define recycled content as the total amount of scrap metal used in production less melt loss. The percentage of recycled content within our aluminum rolled product shipments increased from 33% to 61% from fiscal 2011 to fiscal 2019. We work closely with our customers on innovation to drive more sustainable products for society. We are the only company of its size offering high-recycled content aluminum sheet for beverage and specialty product customers. We are also working closely with our automotive customers to redesign automotive alloys to be made with more recycled inputs, as well as purchasing the aluminum scrap resulting from our closed-loop recycling partnership with our automotive customers.

Strengthen our Product Portfolio

We maintain a focus on capturing global growth in beverage can, automotive and specialty products markets. Our management approach helps us to systematically identify opportunities that improve the profitability of our operations through product portfolio analysis. This ensures that we grow in attractive market segments, while also taking actions to exit unattractive ones. We will continue to focus on these core product markets to drive enhanced profitability, but will also continue to broaden our customer base and explore new verticals and product markets that fit within our overall strategic vision, which is to lead the aluminum industry as the partner of choice for innovative solutions.

Invest in Growth Opportunities

Over the past several years, we invested in world-class assets and technical capabilities to meet increasing global demand for aluminum within the automotive market due to our continued focus on maintaining a scalable business model and growing alongside our customers. We now have automotive finishing lines in North America, Europe, and Asia operating near full production levels. In fiscal 2018, we announced plans to build additional automotive finishing capacity in North America with a 200 kt greenfield expansion in Guthrie, Kentucky and a 100 kt brownfield expansion at our existing facility in Changzhou, China. Construction is underway at both locations. Guthrie is expected to begin commissioning towards the end of fiscal 2020, with Changzhou expected to begin commissioning in fiscal 2021. In fiscal 2019, we also announced plans to expand aluminum rolling, casting and recycling capacity at our flagship South American facility in Pindamonhangaba, Brazil (Pinda) by 100 kt and 60 kt, respectively. Construction began in fiscal 2019 and is expected to be commissioned in late fiscal 2021.

In addition to these recently announced organic investments, in the second quarter of fiscal 2019, Novelis signed a definitive agreement to acquire Aleris Corporation (Aleris), a global supplier of rolled aluminum products, for approximately \$2.6 billion including the assumption of debt. For Novelis, Aleris, and their customers, the proposed acquisition will deliver a number of significant benefits by:

- Establishing a more diverse product portfolio, including aerospace, beverage can, automotive, building and construction, commercial transportation and specialty products.
- Integrating complementary assets in Asia to include recycling, casting, rolling and finishing capabilities and allowing Novelis to more efficiently serve the growing Asia market.
- Broadening Novelis' automotive business to meet growing demand and diversifying its global footprint and customer base.
- Strengthening our ability to compete against steel by gaining a greater platform for production, innovation and service.
- Executing a fully debt funded deal with leverage forecasted to peak below 4x at closing, and return to 3x in approximately two years after closing.

The acquisition is subject to customary closing conditions and regulatory approvals and is expected to close in fiscal 2020 (third quarter of calendar year 2019). Until the closing, the companies will continue to operate as separate entities. Following close, the two companies will integrate Aleris into Novelis, which will remain headquartered in Atlanta.

We will continue to explore other potential opportunities that will drive profitable volume growth in the automotive and other core end markets, while maintaining a balanced and disciplined financial approach in our decision making process.

Raw Materials and Suppliers

The input materials we use in manufacturing include primary aluminum, recycled aluminum, sheet ingot, alloying elements and grain refiners. These raw materials are generally available from several sources and are not generally subject to supply constraints in normal market conditions. We also consume considerable amounts of energy in the operation of our facilities.

Aluminum

We obtain aluminum from a number of sources, including the following:

Primary Aluminum Sourcing. We purchased or tolled approximately 1,350 kt of primary aluminum in fiscal 2019 in the form of sheet ingot, standard ingot and molten metal.

Aluminum Products Recycling. We operate facilities in several plants to recycle post-consumer aluminum, such as UBCs collected through recycling programs. In addition, we have agreements with several of our large customers where we have a closed-looped system whereby we take production scrap material from their fabricating activity and re-melt, cast and roll it to re-supply these customers with aluminum sheet. Other sources of recycled material include lithographic plates, and products with longer lifespans, like vehicles and buildings, which are starting to become high volume sources of recycled material. We purchased or tolled approximately 1,987 kt of recycled material inputs (less melt loss) in fiscal 2019.

The overall benefit we receive from utilizing recycled metal is influenced by: 1) the overall price levels of the LME and local market premiums, 2) the spread between the price for recycled aluminum and the LME primary aluminum price and 3) our consumption levels of the recycled material inputs. We have in the past and may continue to seek to stabilize our future exposure to metal prices through the use of derivative instruments.

Our recycled content performance and methodology are detailed in our annual sustainability report, which can be found at www.novelis.com/sustainability. Information in our sustainability report does not constitute part of this Form 10-K.

Energy

We use several sources of energy in the manufacturing and delivery of our aluminum rolled products. In fiscal 2019, natural gas and electricity represented approximately 97% of our energy consumption by cost. We also use fuel oil and transport fuel. The majority of energy usage occurs at our casting centers and during the hot rolling process. Our cold rolling facilities require relatively less energy. We purchase our natural gas on the open market, which subjects us to market pricing fluctuations. We have in the past and may continue to seek to stabilize our future exposure to natural gas prices through the use of derivative instruments. A portion of our electricity requirements are purchased pursuant to long-term contracts in the local regions in which we operate. A number of our facilities are located in regions with regulated prices, which affords relatively stable costs. We have fixed pricing on some of our energy supply arrangements.

Our Operating Segments

Due in part to the regional nature of supply and demand of aluminum rolled products and in order to best serve our customers, we manage our activities on the basis of geographical areas and are organized under four operating segments: North America, Europe, Asia and South America. Each segment manufactures aluminum sheet and light gauge products, and recycles aluminum.

The table below shows "Net sales" and total shipments by segment. For additional financial information related to our operating segments, see Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying consolidated financial statements.

Net sales in millions Shipments in kilotonnes	Year Ended March 31,		
	2019	2018	2017
Consolidated			
Net sales	\$ 12,326	\$ 11,462	\$ 9,591
Total shipments	3,419	3,333	3,176
North America (A)			
Net sales	\$ 4,581	\$ 3,951	\$ 3,228
Total shipments	1,150	1,090	1,014
Europe (A)			
Net sales	\$ 3,376	\$ 3,447	\$ 2,968
Total shipments	941	938	951
Asia (A)			
Net sales	\$ 2,190	\$ 2,110	\$ 1,791
Total shipments	729	719	699
South America (A)			
Net sales	\$ 2,091	\$ 1,931	\$ 1,510
Total shipments	663	653	562

(A) "Net sales" and "Total shipments" by segment include intersegment sales and the results of our affiliates on a proportionately consolidated basis, which is consistent with the way we manage our business segments.

The following is a description of our operating segments during all or part of March 31, 2019:

North America

Novelis North America operates eight aluminum products facilities. This includes two fully integrated aluminum rolling facilities, two dedicated recycling facilities and two facilities with recycling operations. These sites and other plants in North America manufacture a broad range of aluminum sheet and light gauge products. End-use markets for this segment include beverage and food cans, containers and packaging, automotive and other transportation applications, architectural and other industrial applications. The majority of North America's volumes are currently directed toward the beverage can sheet market.

In response to the lightweighting trend in the automotive industry, we have expanded our Oswego, New York facility by constructing three automotive finishing lines and supporting automotive scrap recycling capabilities. In fiscal year 2018, we announced plans to further expand our automotive finishing capacity in North America with a 200kt greenfield expansion in Guthrie. Construction is underway and is expected to begin commissioning towards the end of fiscal 2020.

Recycling is important in the manufacturing process and we have three facilities in North America that re-melt post-consumer aluminum and recycled process material. Most of the recycled material is from UBCs and automotive scrap, and the material is cast into sheet ingot at our plants in Greensboro, Georgia; Berea, Kentucky; Russellville, Kentucky; and Oswego, New York.

Europe

Novelis Europe operates ten aluminum rolled product facilities. This includes facilities with recycling activities at Sierre, Switzerland, Pieve, Italy, Latchford, United Kingdom, and at Nachterstedt and Neuss, Germany. These sites manufacture a broad range of sheet and foil products. We also have distribution centers in Italy and sales offices in several European countries. End-use markets for this segment include beverage and food can, automotive, architectural and industrial products, foil products and other products. Beverage and food can represent the largest end-use market in terms of shipment volume for Europe.

In fiscal 2019, Novelis acquired operating facilities and manufacturing assets at its Sierre, Switzerland plant that have historically been leased. Our fully integrated recycling facility at our Nachterstedt, Germany plant is the largest aluminum recycling facility in the world. The second automotive finishing line at our Nachterstedt, Germany facility has successfully expanded our production of aluminum automotive sheet products in Europe.

Asia

Novelis Asia operates three aluminum rolled product facilities. This includes two facilities with recycling operations at the Ulsan and Yeongju, South Korea plants. Novelis Asia also owns one recycling facility in Binh Dong, Vietnam, which ceased operations in fiscal 2018. These sites manufacture a broad range of aluminum sheet and light gauge products. End-use markets include beverage and food cans, electronics, architectural, automotive, foil, industrial and other products. The beverage can market represents the largest end-use market in terms of volume.

In fiscal 2018, Novelis entered into a joint venture agreement to sell 50 percent of its interest in the Ulsan, South Korea facility to Kobe Steel (Kobe). Through the venture, Novelis and Kobe jointly own and operate the Ulsan facility, with each company remaining responsible for its metal supply and commercial relationships.

In fiscal 2019, we announced plans to add 100 kt of additional automotive finishing capacity at our Changzhou, China facility, which primarily focuses on heat treatment. Construction is underway and is expected to be commissioned in fiscal 2021.

South America

Novelis South America operates two aluminum rolled product facilities. This includes one facility with recycling operations. These facilities manufacture a broad range of can sheet, industrial sheet and light gauge products. The main markets are beverage and food can, specialty, industrial, foil and other packaging and transportation end-use applications. Beverage can represents the largest end-use application in terms of shipment volume.

In fiscal 2019, we announced plans to expand aluminum rolling, casting and recycling capacity in Pinda by 100 kt and 60 kt, respectively. Construction began in late fiscal 2019 and is expected to be complete in late fiscal 2021.

Financial Information About Geographic Areas

Certain financial information about geographic areas is contained in Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying consolidated financial statements.

Our Customers

We focus significant efforts on developing and maintaining close working relationships with our customers and end-users. Our major customers include:

Beverage and Food Cans

Anheuser-Busch InBev
Ardagh Group
Ball Corporation
Can-Pack S.A.
Crown Holdings Inc., formerly Crown Cork & Seal Company
Pepsico
Various bottlers of the Coca-Cola System

Construction, Industrial and Other

Agfa Graphics
Aluflexpack
Amcor
Facchini S.A.
Feron
Klöckner Metals
Lotte Aluminum Co. Ltd.
Prefa
Reynolds Consumer Products LLC
Ryerson Inc.
ThyssenKrupp

Automotive

BMW Group
Chery Jaguar Land Rover
Daimler Group
Fiat Chrysler Automobiles N.V.
Ford Motor Company
General Motors LLC
Hyundai Motors Corporation
Jaguar Land Rover Limited
NIO
Volkswagen Group

Electronics

LG International Corporation
Samsung Electronics Co., Ltd.

Our single largest end-use product is beverage can sheet. We sell can sheet directly to beverage makers and bottlers as well as to can fabricators that sell the cans they produce to bottlers. In certain cases, we operate under umbrella agreements with beverage makers and bottlers under which they direct their can fabricators to source their requirements for beverage can body, end and tab stock from us.

Additional information related to our top customers is contained in Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information to our accompanying consolidated financial statements.

Distribution and Backlog

We have two principal distribution channels for the end-use markets in which we operate: direct sales to our customers and sales to distributors.

	Year Ended March 31,		
	2019	2018	2017
Direct sales as a percentage of total “Net sales”	97%	97%	94%
Distributor sales as a percentage of total “Net sales”	3%	3%	6%

Direct Sales

We supply various end-use markets all over the world through a direct sales force operating from individual facilities or sales offices, as well as from regional sales offices. The direct sales channel typically serves very large, sophisticated fabricators and original equipment manufacturers. Longstanding relationships are maintained with leading companies in industries using aluminum rolled products. Supply contracts for large global customers generally range from one to five years in length and historically there has been a high degree of renewal business with these customers. Certain customers require suppliers to complete a lengthy and expensive qualification process. The ability to obtain and maintain these qualifications can represent a competitive advantage. Given the customized nature of products and in some cases, large order sizes, switching costs are significant, thus adding to the overall consistency of the customer base.

We also use third party agents or traders in some regions to complement our own sales force. These agents provide service to our customers in countries where we do not have local expertise.

Distributors

We also sell our products through third party aluminum distributors. Customers of distributors are widely dispersed, and sales through this channel are highly fragmented. Distributors sell mostly commodity or less specialized products into many end-use markets in small quantities, including the architectural and industrial markets. We collaborate with our distributors to develop new end-use products and improve the supply chain and order efficiencies.

Backlog

Order backlog is not a material aspect of our business.

Research and Development

The table below summarizes our “Research and development expenses”, which include mini-scale production lines equipped with hot mills, can lines and continuous casters (in millions).

	Year Ended March 31,		
	2019	2018	2017
Research and development expenses	\$ 72	\$ 64	\$ 58

We conduct research and development activities in order to meet current and future customer requirements, improve our products and reduce our conversion costs. We have a global research and technology center in Kennesaw, Georgia, which offers state of the art research and development capabilities to help Novelis meet the global long-term demand for aluminum used for the automotive, beverage can and specialty markets. We also have a global casting engineering and technology center in Spokane, Washington specializing in molten metal processing.

Our Employees

The table below summarizes our approximate number of employees by region, including our proportionate share of those employed by less than wholly owned affiliates.

Employees	North America (A)	Europe	Asia	South America	Total
March 31, 2019	3,510	4,690	1,440	1,630	11,270
March 31, 2018	3,400	4,770	1,400	1,570	11,140

(A) Includes employees within our Corporate headquarters located in Atlanta, Georgia.

We consider our employee relations to be satisfactory. A substantial portion of our employees are represented by labor unions and their employment conditions are governed by collective bargaining agreements. Collective bargaining agreements are negotiated on a site, regional or national level, and are of varying durations.

Intellectual Property

We actively review intellectual property arising from our operations and our research and development activities and, when appropriate, we apply for patents in appropriate jurisdictions. We currently hold patents and patent applications on approximately 367 different items of intellectual property. While these patents and patent applications are important to our business on an aggregate basis, no single patent or patent application is deemed to be material to our business.

We have applied for, or received registrations for, the “Novelis” word trademark and the “Novelis” logo trademark in approximately 50 countries where we have significant sales or operations. Novelis uses the “Aditya Birla” logo under license from Aditya Birla Management Corporation Private Limited.

We have also registered the word “Novelis” and several derivations thereof as domain names in numerous top level domains around the world to protect our presence on the world wide web.

Environment, Health and Safety

Our global operations are subject to environmental laws and regulations from various jurisdictions, which govern, among other things, air emissions, wastewater discharges, the handling, storage and disposal of hazardous substances and wastes, the remediation of contaminated sites, and restoration of natural resources, and employee health and safety. Future environmental regulations may impose stricter compliance requirements on the industries in which we operate. Additional equipment or process changes at some of our facilities may be needed to meet future requirements. The cost of meeting these requirements may be significant. Failure to comply with such laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions and other orders, including orders to cease operations.

We are involved in proceedings under the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, or analogous state provisions regarding our liability arising from the usage, storage, treatment or disposal of hazardous substances and wastes at a number of sites in the United States, as well as similar proceedings under the laws and regulations of the other jurisdictions in which we have operations, including Brazil, certain countries in the European Union, and Korea. Many of these jurisdictions have laws that impose joint and several liability, without regard to fault or the legality of the original conduct, for the costs of environmental remediation, natural resource damages, third party claims, and other expenses. In addition, we are, from time to time, subject to environmental reviews and investigations by relevant governmental authorities.

We have established procedures for regularly evaluating environmental loss contingencies, including those arising from environmental reviews and investigations and any other environmental remediation or compliance matters. We believe we have a reasonable basis for evaluating these environmental loss contingencies, and we also believe we have made reasonable estimates for the costs that are reasonably possible for these environmental loss contingencies. Accordingly, we have established liabilities based on our estimates for the currently anticipated costs that are deemed probable associated with these environmental matters. Management has determined that the currently anticipated costs associated with these environmental matters will not, individually or in the aggregate, materially impair our operations or materially adversely affect our financial condition.

Available Information

We are a voluntary filer and not subject to the reporting and information requirements of the Securities Exchange Act of 1934, as amended (Exchange Act). However, we file periodic reports and other information with the Securities and Exchange Commission (SEC). We make these filings available on our website free of charge, the URL of which is <http://www.novelis.com>, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC. The SEC maintains a website (<http://www.sec.gov>) that contains our annual, quarterly and current reports and other information we file electronically with the SEC. Information on our website does not constitute part of this Form 10-K.

Item 1A. Risk Factors

In addition to factors discussed elsewhere in this report, the following factors could materially affect our business, financial condition or results of operations in the future. The following factors, among others, could cause our actual results to differ from those projected in any forward looking statements we make.

Competitive and Strategic Risks

Certain of our customers are significant to our revenues, and we could be adversely affected by changes in the business or financial condition of these significant customers or by the loss of their business.

Our ten largest customers accounted for approximately 65%, 65%, and 63% of our total "Net sales" for the year ended March 31, 2019, 2018 and 2017, respectively. A significant downturn in the business or financial condition of our significant customers could materially adversely affect our results of operations and cash flows. In addition, some of our customer contracts are subject to renewal and renegotiation at periodic intervals or upon changes in competitive supply conditions. Our failure to successfully renew or renegotiate such agreements could result in a reduction or loss in customer purchase volume or revenue. Additionally, consolidation among our customers may enable them to use increased leverage in negotiating prices and other contract terms. Consolidation in our customer base may also lead to reduced demand for our products or cancellations of sales orders.

We also factor trade receivables from time to time to manage working capital. Any deterioration of the financial condition or downgrade of the credit rating of certain of our customers may make it more difficult or costly for us to engage in these activities, which could negatively impact our cash flows and liquidity.

We face significant price and other forms of competition from other aluminum rolled products producers and producers of other materials.

The markets in which we operate are highly competitive. We compete primarily on the basis of our value proposition, including price, product quality, ability to meet customers' specifications, range of products offered, global footprint, technical support and customer service. Some of our competitors may benefit from more efficient technologies and lower raw material and energy costs. Increases in competition resulting from new market entrants or increases in production capacity by our competitors could cause us to lose market share or lose a large customer, or force us to reduce prices to remain competitive.

In addition, aluminum competes with other materials, such as steel, plastics, composite materials and glass for various applications, including packaging, automotive, architectural, industrial, and consumer durables end-use markets. Our customers may choose materials other than aluminum to achieve desired attributes for their products. For example, customers in the automotive industry seeking to reduce vehicle weight may increase their use of high-strength steel rather than aluminum for certain applications given the price differential between steel and aluminum.

We may not realize the anticipated benefits of acquisitions, divestitures, joint ventures or other strategic investments.

As part of our strategy for growth, we have in the past and may in the future pursue acquisitions, divestitures, joint ventures or other strategic investments, which may not be completed or, if completed, may not produce the benefits we anticipate. For example, on July 26, 2018, we announced that we had signed a definitive agreement to acquire Aleris for approximately \$2.6 billion. Upon consummation of the acquisition, we will acquire 13 Aleris manufacturing facilities spanning across North America, Asia, and Europe. The acquisition is subject to customary closing conditions and regulatory approvals. We may not achieve the anticipated benefits from the Aleris acquisition, and we may incur costs in excess of what we anticipate. In addition, we announced other significant strategic investments during fiscal year 2019, including a \$180 million investment in Changzhou, China to double the capacity of our existing manufacturing facility at that location and a \$175 million investment in our plant in Pindamonhangaba, Brazil, to increase our production and recycling capacity. Further, we announced in the first quarter of fiscal 2019 that we broke ground on a \$300 million greenfield automotive aluminum sheet manufacturing facility in Guthrie, Kentucky.

There are numerous risks commonly encountered in strategic transactions, including the risk that management's time and energy may be diverted, disrupting our existing businesses; risks associated with managing joint ownership structures with shared decision making authority; difficulty retaining key employees of an acquired business; difficulties due to limited prior experience in new markets we may enter, including aerospace; risks that we may not be able to complete a transaction that has been announced, effectively integrate businesses acquired or generate benefits we anticipated.

Operational Risks

If we are unable to obtain sufficient quantities of primary aluminum, recycled aluminum, sheet ingot and other raw materials used in the production of our products, our ability to produce and deliver products or to manufacture products using the desired mix of metal inputs could be adversely affected.

The supply risks relating to our metal inputs vary by input type. For example, we produce some of our sheet ingot requirements internally and source the remainder from multiple third parties in various jurisdictions, usually under contracts having a duration of at least one year. If our suppliers are unable to deliver sufficient quantities of aluminum and other raw materials to the necessary locations on a timely basis, our production could be disrupted and our net sales, profitability and cash flows could be adversely affected. Although aluminum is traded on global exchanges, developing alternative suppliers of sheet ingot could be time consuming and expensive.

Our operations are energy-intensive and our profitability and cash flows may decline if energy costs were to rise, or if our energy supplies were interrupted.

We consume substantial amounts of energy in our rolling and casting operations. The factors affecting our energy costs and supply reliability tend to be specific to each of our facilities. A number of factors could materially affect our energy position adversely including:

- increases in costs of natural gas;
- increases in costs of supplied electricity;
- increases in fuel oil related to transportation;
- interruptions in energy supply due to equipment failure or other causes; and
- the inability to extend energy supply contracts upon expiration on economical terms.

If energy costs were to rise, or if energy supplies or supply arrangements were disrupted, our profitability and cash flows could decline.

A majority of our facilities are staffed by a unionized workforce, and union disputes and other employee relations issues could materially adversely affect our financial results.

In each geographic region where we have operating facilities, a substantial portion of our employees are represented by labor unions under collective bargaining agreements with varying durations and expiration dates. Although we have not experienced a strike or work stoppage in recent years, we may not be successful in preventing such an event from occurring in the future at one or more of our manufacturing facilities. In addition, we may not be able to satisfactorily renegotiate our collective bargaining agreements when they expire.

Any work stoppages or material changes in the terms of our labor agreements could have an adverse impact on our financial condition.

Loss of our key management and other personnel, or an inability to attract and retain such management and other personnel, could adversely impact our business.

We employ all of our senior executive officers and other highly-skilled key employees on an at-will basis, and their employment can be terminated by us or them at any time, for any reason and without notice, subject, in certain cases, to severance payment obligations. Competition for qualified employees among companies that rely heavily on engineering and technology is intense, and if our highly skilled key employees leave us, we may be unable to promptly attract and retain qualified replacement personnel, which could result in our inability to improve manufacturing operations, conduct research activities successfully, develop marketable products and compete effectively for growth in key markets.

We could be adversely affected by unplanned disruptions at our operating facilities.

In the past, we have experienced production interruptions at our plants due to the breakdown of equipment, fires, weather events and external causes. For example, in May 2018, truck drivers in Brazil engaged in ten days of protest, blocking roadways across the country and preventing the normal flow of goods. The protests disrupted our supply chain, interrupted production and resulted in delayed shipments to our customers.

We may experience such disruptions in the future due to similar uncontrollable events. Because many of our customers are, to varying degrees, dependent on planned deliveries from our plants, any customers that have to reschedule their own production due to our missed deliveries could pursue claims against us and reduce their future business with us. In addition to facing claims from customers, we may incur costs to correct any of these problems. Further, our reputation among actual and potential customers may be harmed, resulting in loss of business. While we maintain insurance policies covering, among other things, physical damage, business interruptions and product liability, these policies may not cover all of our losses.

Our business has been and will continue to be exposed to various economic and political risks associated with our global operations.

Due to the global reach of our business, we are subject to financial, political, economic and other business risks in connection with doing business abroad. Operating in diverse geographic regions exposes us to a number of risks and uncertainties, such as changes in international trade regulation, including duties and tariffs; and political instability that may disrupt economic activity, including the uncertainty related to the United Kingdom's withdrawal from the European Union.

Our financial condition and results of operations depend significantly on worldwide economic conditions. Future adverse developments in the U.S. economy or in other countries where we do business pose a risk because our customers may postpone purchases in response to negative financial news and tighter credit.

We face risks relating to certain joint ventures, subsidiaries and assets that we do not entirely control.

Some of our activities are, and will in the future be, conducted through entities that we do not entirely control or wholly-own. These entities include our Alunorf, Germany, Ulsan, Korea and Logan, Kentucky joint ventures. Under the governing documents of these businesses, we share decision making authority and operational control which may result in conflicts over management over these businesses. In addition, because we do not exercise control over the business practices of our joint venture partners, we could be subject to reputational damage or other consequences of improper conduct by our joint venture partners or their inability to fulfill their obligations under the joint venture.

Security breaches and other disruptions to our information technology networks and systems could interfere with our operations, and could compromise the confidentiality of our proprietary information.

We rely upon information technology networks and systems, some of which are managed by third parties, to process, transmit and store electronic information, and to manage or support a variety of business and manufacturing processes and activities. Additionally, we collect and store sensitive data, including intellectual property, proprietary business information, as well as personally identifiable information of our employees, in data centers and on information technology networks. These activities are subject to various laws and regulations in the United States and abroad regarding privacy and data security.

We have increased our management focus on and financial investments in systems and processes intended to secure our information technology systems, prevent unauthorized access to or loss of sensitive data, ensure business continuity and comply with applicable laws. These efforts include engaging third party providers from time to time to test the vulnerability of our systems and recommend solutions to upgrade the security of our systems. We also employ a number of measures to protect and defend against cyber attacks, including technical security controls, data encryption, firewalls, intrusion prevention systems, anti-virus software and frequent backups.

Despite the measures we have taken, our information technology networks and systems may be vulnerable to damage, disruptions or shutdowns due to attacks by hackers or breaches due to errors or malfeasance by employees, contractors and others who have access to our networks and systems, or other disruptions during the process of upgrading or replacing computer software or hardware, power outages, computer viruses, telecommunication or utility failures or natural disasters or other catastrophic events. The occurrence of any of these events could compromise our networks and the information stored there could be accessed, publicly disclosed, lost or stolen. Any such access, disclosure or other loss of information could result in legal claims or proceedings, liability or regulatory penalties under laws protecting the privacy of personal information, disrupt operations and reduce the competitive advantage we hope to derive from our investment in new or proprietary business initiatives.

Financial Risks

Our results and short term liquidity can be negatively impacted by timing differences between the prices we pay under purchase contracts and metal prices we charge our customers.

Our purchase and sales contracts for primary aluminum are based on the LME price plus a regional market premium, which is a surcharge in addition to the LME price. There are typically timing differences between the pricing periods for purchases and sales where purchase prices we pay tend to be fixed and paid earlier than sales prices we charge our customers. This creates a price exposure we call “metal price lag.” We use derivative instruments to manage the timing differences related to LME associated with metal price lag. Under normal market conditions, the majority of our premium exposure hedging occurs in North America, although the exposure is not fully hedged. For our Europe, South America and Asia businesses, the derivative market for local market premiums is not sufficiently robust or efficient for us to offset the impacts of local market premium price movements beyond a small volume. The timing difference associated with metal price lag could positively or negatively impact our operating results and short term liquidity.

A deterioration of our financial condition, a downgrade of our ratings by a credit rating agency or other factors could limit our ability to enter into, or increase our costs of, financing and hedging transactions, and our business relationships and financial condition could be adversely affected.

A deterioration of our financial condition or a downgrade of our credit ratings for any reason could increase our borrowing costs, limit our access to the capital or credit markets, adversely affect our ability to obtain new financing on favorable terms or at all, result in more restrictive covenants and have an adverse effect on our business relationships with customers, suppliers and financial counterparties. From time to time, we enter into various forms of hedging activities against currency, interest rate, energy and metal price fluctuations. Financial strength and credit ratings are important to the availability and terms of these hedging activities. As a result, any deterioration of our financial condition or downgrade of our credit ratings may make it more difficult or costly for us to engage in these activities in the future.

In addition, in July 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, announced that it intends to phase out LIBOR by the end of 2021. The replacement for LIBOR is uncertain at this time. It is not possible to predict entirely the effect of a LIBOR phase out on Novelis, but the costs of our variable rate indebtedness could increase as a result of these developments.

Adverse changes in currency exchange rates could negatively affect our financial results or cash flows and the competitiveness of our aluminum rolled products relative to other materials.

We are exposed to the effects of changes in the exchange rates of the U.S. dollar, the Euro, the British pound, the Brazilian real, the Korean won, the Swiss franc and other currencies. We have implemented a hedging policy to manage currency exchange rate risks to an acceptable level based on management's judgment of the appropriate trade-off between risk, opportunity and cost; however, this hedging policy may not successfully or completely eliminate the effects of currency exchange rate fluctuations, which could have a material adverse effect on our financial results and cash flows.

We prepare our consolidated financial statements in U.S. dollars, but a portion of our earnings and expenditures are denominated in other currencies, primarily the Euro, the Korean won and the Brazilian real. Changes in exchange rates will result in increases or decreases in our operating results and may also affect the book value of our assets located outside the U.S.

Our results of operations, cash flows and liquidity could be adversely affected if we were unable to transact in derivative instruments or if counterparties to our derivative instruments fail to honor their agreements.

From time to time, we use various derivative instruments to manage the risks arising from fluctuations in aluminum prices, exchange rates, energy prices and interest rates. If for any reason we were unable to transact in derivative instruments to manage these risks, our results of operations, cash flows and liquidity could be adversely affected. In addition, we may be exposed to losses in the future if the counterparties to our derivative instruments fail to honor their agreements. In particular, deterioration in the financial condition of our counterparties and any resulting failure to pay amounts owed to us or to perform obligations owed to us could have a negative effect on our business and financial condition. Further, if major financial institutions consolidate and are forced to operate under more restrictive capital constraints and regulations, there could be less liquidity, or higher costs to transact, in the derivative markets, which could have a negative effect on our ability or our costs to hedge and transact with creditworthy counterparties.

An adverse decline in the liability discount rate, lower-than-expected investment return on pension assets and other factors could affect our results of operations or amount of pension funding contributions in future periods.

Most of our pension obligations relate to funded defined benefit pension plans for our employees in the U.S., the U.K. Switzerland, and Canada, unfunded pension benefits in Germany and lump sum indemnities payable to our employees in France, Italy, and Korea upon retirement or termination. Our pension plan assets consist primarily of funds invested in stocks and bonds. Our estimates of liabilities and expenses for pensions and other postretirement benefits incorporate a number of assumptions, including expected long-term rates of return on pension plan assets and interest rates used to discount future benefits. The most significant year-end assumptions used by Novelis to estimate pension or other postretirement benefit income or expense for the following year are the discount rate applied to plan liabilities and the expected long-term rate of return on plan assets. Our results of operations, liquidity or shareholder's (deficit) equity in a particular period could be adversely affected by capital market returns that are less than their assumed long-term rate of return or a decline of the rate used to discount future benefits. These factors or others may require us to make unexpected cash contributions to the pension plans in the future, preventing the use of such cash for other purposes.

Our goodwill, other intangible assets and other long-lived assets could become impaired, which could require us to take non-cash charges against earnings.

We assess, at least annually and potentially more frequently, whether the value of our goodwill has been impaired. We assess the recoverability of finite-lived other intangible assets and other long-lived assets whenever events or changes in circumstances indicate we may not be able to recover the asset's carrying amount. Any impairment of goodwill, other intangible assets, or long-lived assets as a result of such analysis would result in a non-cash charge against earnings, which could materially adversely affect our reported results of operations. A significant and sustained decline in our future cash flows, a significant adverse change in the economic environment or slower growth rates could result in the need to perform additional impairment analysis in future periods.

Additional tax expense, tax liabilities or tax compliance costs could adversely impact our profitability.

We are subject to income taxation in many jurisdictions. Judgment is required in determining our worldwide income tax provision and accordingly there are many transactions and computations for which our final income tax determination is uncertain. We are routinely audited by income tax authorities in many tax jurisdictions. Although we believe the recorded tax estimates are reasonable, the ultimate outcome from any audit (or related litigation) could be materially different from amounts reflected in our income tax provisions and accruals. Future settlements of income tax audits may have a material effect on earnings between the period of initial recognition of tax estimates in the financial statements and the point of ultimate tax audit settlement. Additionally, it is possible that future income tax legislation in any jurisdiction to which we are subject may be enacted that could have a material impact on our worldwide income tax provision beginning with the period that such legislation becomes effective. For example, the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"), which was enacted in the United States on December 22, 2017, introduced extensive reforms of the Internal Revenue Code. During 2018, the Internal Revenue Service began a number of guidance projects which serve to both interpret and implement the Act. Those guidance projects, which included both Proposed and Final Treasury Regulations, will continue into 2019. We will continue to evaluate the overall impact of the Act on our effective tax rate and balance sheet in light of current and future regulations and interpretive guidance from tax authorities. For additional discussion of the Act and tax amounts recorded in our financial statements, see "Management's Discussion and Analysis."

The covenants in our credit facilities and the indentures governing our Senior Notes impose operating and financial restrictions on us.

Our credit facilities and the indentures governing our Senior Notes impose certain operating and financial restrictions on us. These restrictions limit our ability and the ability of our restricted subsidiaries, among other things, to:

- incur additional debt and provide additional guarantees;
- pay dividends and make other restricted payments, including certain investments;
- create or permit certain liens;
- make certain asset sales;
- use the proceeds from the sales of assets and subsidiary stock;
- create or permit restrictions on the ability of our restricted subsidiaries to pay dividends or make other distributions to us;
- engage in certain transactions with affiliates;
- make certain acquisitions;
- enter into sale and leaseback transactions; and
- consolidate, merge or transfer all or substantially all of our assets or the assets of our restricted subsidiaries.

See Note 11 — Debt for additional discussion.

Other Legal and Regulatory Risks

Our global operations are subject to changes in laws and government regulations that may adversely affect our business and operations.

Compliance with U.S. and foreign laws and regulations, such as import and export requirements, embargoes and trade sanctions laws, anti-corruption laws, tax laws, foreign exchange controls and cash repatriation restrictions and data privacy regulations, increases our costs of doing business outside the U.S.

In addition, the global scale of our operations exposes us to risks relating to international trade policies including import quotas and tariffs, as well as retaliatory policies by governments against such policies. Changes in regulations and policies can impact the competitiveness of our products and negatively impact our business, results of operations and financial condition.

We are subject to a broad range of environmental, health and safety laws and regulations, and we may be exposed to substantial environmental, health and safety costs and liabilities.

We are subject to a broad range of environmental, health and safety laws and regulations in the jurisdictions in which we operate. These laws and regulations impose stringent environmental, health and safety protection standards and permitting requirements regarding, among other things, air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, post-mining reclamation and working conditions for our employees. The costs of complying with these laws and regulations, including participation in assessments and remediation of contaminated sites and installation of pollution control facilities, have been, and in the future could be, significant. In addition, these laws and regulations may also result in substantial environmental liabilities associated with divested assets, third party locations and past activities. The impact that our operations may have on the environment, as well as exposures to hazardous substances or wastes associated with our operations, could result in civil or criminal fines or penalties and enforcement actions issued by regulatory or judicial authorities enjoining, curtailing or closing operations or requiring corrective measures, any of which could materially and adversely affect us.

Further, increased concern over climate change has led to new and proposed legislative and regulatory initiatives, such as cap- and-trade systems and additional limits on emissions of greenhouse gases or Corporate Average Fuel Economy standards in the United States. Additional new regulation could directly and indirectly affect our customers and suppliers (through an increase in the cost of production or their ability to produce satisfactory products) or our business (through an impact on our inventory availability, cost of sales, operations or demand for the products we sell). Any increased costs of these energy sources because of new laws could be passed along to us and our customers and suppliers, which could also have a negative impact on our profitability.

We may be exposed to significant legal proceedings or investigations.

From time to time, we are involved in, or the subject of, disputes, proceedings and investigations with respect to a variety of matters, including environmental, health and safety, product liability, employee, tax, personal injury, contractual and other matters as well as other disputes and proceedings that arise in the ordinary course of business.

Any claims against us or any investigations involving us, whether meritorious or not, could be costly to defend or comply with and could divert management's attention as well as operational resources. Any such dispute, litigation or investigation, whether currently pending or threatened in the future, may have a material adverse effect on our financial results and cash flows. We generally maintain insurance against many product liability risks, but there can be no assurance that this coverage will be adequate for any liabilities ultimately incurred. In addition, there is no assurance that insurance will continue to be available on terms acceptable to us.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

Our global headquarters are located in Atlanta, Georgia. Our global research and technology center is located in Kennesaw, Georgia, which contains state-of-the-art research and development capabilities to help us better partner and innovate with our customers. We also have a global casting engineering and technology center in Spokane, Washington specializing in molten metal processing. Our regional headquarters are located in the following cities: North America - Atlanta, Georgia; Europe - Küsnacht, Switzerland; Asia - Seoul, South Korea; and South America - Sao Paulo, Brazil.

The total number of operating facilities within our operating segments during all or part of the year ended March 31, 2019 is shown in the table below, including operating facilities we jointly own and operate with third parties.

	Total Operating Facilities	Facilities with Recycling Operations
North America	8	4
Europe	10	5
Asia	3	2
South America	2	1
Total	23	12

The following tables provide information, by operating segment, about the plant locations, processes and major end-use markets/applications for the aluminum rolled products, recycling and primary metal facilities we operated during all or part of the year ended March 31, 2019.

North America

<u>Locations (A)</u>	<u>Plant Processes</u>	<u>Major Products</u>
Berea, Kentucky	Recycling, sheet ingot casting	Sheet ingot from recycled metal
Fairmont, West Virginia	Cold rolling, finishing	Container, HVAC and auto fin material
Greensboro, Georgia	Recycling, sheet ingot casting	Sheet ingot from recycled metal
Kingston, Ontario	Cold rolling, finishing	Automotive sheet, construction sheet, industrial sheet
Russellville, Kentucky (B)	Hot rolling, cold rolling, finishing, remelt, casting, recycling	Can stock, industrial sheet
Oswego, New York	Sheet ingot casting, hot rolling, cold rolling, recycling, brazing, finishing, heat treatment	Can stock, automotive sheet, construction sheet, industrial sheet, semi-finished coil
Terre Haute, Indiana	Cold rolling, finishing	Container and industrial material
Warren, Ohio	Coating, finishing	Can stock coating

(A) In May 2018, we announced a greenfield expansion to be located in Guthrie, Kentucky that will include heat treatment and pre-treatment lines for automotive sheet finishing. The Guthrie facility is expected to begin commissioning towards the end of fiscal 2020.

(B) Logan Aluminum Inc. (Logan) is operated as a joint venture between Novelis and Tri-Arrows Aluminum Inc. (Tri-Arrows). We own 40% of the outstanding common shares of Logan. See Note 8 — Consolidation for further information about this affiliate.

Europe

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Bresso, Italy	Finishing, painting	Painted sheet, construction sheet
Göttingen, Germany	Cold rolling, finishing, painting	Can stock, food can, painted sheet
Latchford, United Kingdom	Recycling	Sheet ingot from recycled metal
Ludenscheid, Germany	Foil rolling, finishing, converting	Foil, packaging
Nachterstedt, Germany	Cold rolling, finishing, painting, recycling, heat treatment	Automotive sheet, can stock, industrial sheet, painted sheet, construction sheet, sheet ingot
Neuss, Germany (A)	Hot rolling, cold rolling, recycling	Can stock, foilstock, feeder stock for finishing operations
Ohle, Germany	Cold rolling, finishing, converting	Foil, packaging
Pieve, Italy	Continuous casting, cold rolling, finishing, recycling	Coil for finishing operations, industrial sheet
Sierre, Switzerland (B)	Sheet ingot casting, hot rolling, cold rolling, finishing, recycling	Automotive sheet, industrial sheet
Crick, United Kingdom	Finishing	Automotive sheet

(A) Aluminium Norf GmbH (Alunorf) is operated as a 50/50 joint venture between Novelis and Hydro Aluminium Deutschland GmbH (Hydro). See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about this affiliate.

(B) AluInfra Services SA (AluInfra) is operated as a 50/50 joint venture between Novelis and Constellium Valais SA (Constellium). See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about this affiliate.

Asia

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Binh Doung, Vietnam (A)		
Changzhou, China	Heat treatment	Automotive sheet
Ulsan, South Korea (B)	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing	Can stock, construction sheet, industrial sheet, electronics, automotive sheet for finishing operations, foilstock, and recycled material
Yeongju, South Korea	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing	Can stock, construction sheet, industrial sheet, electronics, foilstock and recycled material

(A) We ceased operations at our Binh Doung plant in fiscal 2018, therefore we are excluding this facility from our count of total operating facilities above.

(B) Ulsan Aluminum, Ltd. (UAL) is operated as a 50/50 joint venture between Novelis and Kobe. See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about this affiliate.

South America

<u>Locations</u>	<u>Plant Processes</u>	<u>Major Products</u>
Pindamonhangaba, Brazil	Sheet ingot casting, hot rolling, cold rolling, recycling, finishing, coating	Can stock, construction sheet, industrial sheet, foilstock, sheet ingot
Santo Andre, Brazil	Foil rolling, finishing	Foil

Item 3. Legal Proceedings

We are a party to litigation incidental to our business from time to time. For additional information regarding litigation to which we are a party, see Note 20 — Commitments and Contingencies to our accompanying consolidated financial statements, which are incorporated by reference into this item.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Shareholder Matters and Issuer Purchases of Equity Securities

There is no established public trading market for the Company's common stock. All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco Industries Limited. None of the equity securities of the Company are authorized for issuance under any equity compensation plan.

Dividends or returns of capital are at the discretion of the board of directors and will depend on, among other things, our financial resources, cash flows generated by our business, our cash requirements, legal restrictions under debt covenant agreements and other relevant factors.

Item 6. Selected Financial Data

The selected consolidated financial data should be read in conjunction with our consolidated financial statements for the respective periods and the related notes included elsewhere in this Form 10-K.

All of our common shares were indirectly held by Hindalco; thus, earnings per share data is not reported. Amounts in the tables below are in millions.

	March 31,				
	2019	2018	2017	2016	2015
Net sales	\$ 12,326	\$ 11,462	\$ 9,591	\$ 9,872	\$ 11,147
Net income (loss) attributable to our common shareholder	\$ 434	\$ 635	\$ 45	\$ (38)	\$ 148

	March 31,				
	2019	2018	2017	2016	2015
Total assets	\$ 9,563	\$ 9,515	\$ 8,373	\$ 8,280	\$ 9,102
Long-term debt (including current portion)	\$ 4,347	\$ 4,457	\$ 4,558	\$ 4,468	\$ 4,457
Short-term borrowings	\$ 39	\$ 49	\$ 294	\$ 579	\$ 846
Cash and cash equivalents	\$ 950	\$ 920	\$ 594	\$ 556	\$ 628
Total equity (deficit)	\$ 1,066	\$ 823	\$ (77)	\$ (59)	\$ (70)

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

OVERVIEW AND REFERENCES

Novelis is the leading producer of flat-rolled aluminum products and the world's largest recycler of aluminum. Driven by our purpose to shape a sustainable world together, we work alongside our customers to provide innovative solutions to the beverage can, automotive and high-end specialty markets (includes foil packaging, certain transportation products, architectural, industrial, and consumer durables). We have recycling operations in many of our plants to recycle both post-consumer aluminum and post-industrial aluminum. As of March 31, 2019, we had manufacturing operations in ten countries on four continents, which include 23 operating plants, and recycling operations in twelve of these plants.

The following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to these differences include, but are not limited to, those discussed below and elsewhere in this Form 10-K, particularly in "Special Note Regarding Forward-Looking Statements and Market Data" and "Risk Factors."

HIGHLIGHTS

Year Ended March 31, 2019 Compared with the Year Ended March 31, 2018

We reported "Net income attributable to our common shareholder" of \$434 million, a decrease compared to \$635 million in the prior period. The prior period recognized a one time, pre-tax gain of \$318 million, partially offset by tax expense of \$77 million, related to the sale of shares in Ulsan Aluminum Ltd. (UAL), and a \$19 million non-cash tax benefit resulting from the Tax Cuts and Jobs Act.

We reported an increase in "Segment income" to a record \$1,368 million compared to \$1,215 million in the prior period. The increase is primarily due to a 3% increase in total flat rolled product shipments to a record level, favorable product mix due to portfolio optimization efforts, improved cost efficiencies and favorable metal costs and scrap spreads. As a result of these factors, net cash provided by operating activities was \$728 million and free cash flow was \$408 million. (Refer to "Non-GAAP Financial Measures" for our definition of Free Cash Flow).

With strong financial performance, we are well positioned to execute on our strategy to defend our core businesses, strengthen our product portfolio and invest in growth opportunities that will allow us to better serve our customers for the long term. In fiscal 2018 and fiscal 2019, we announced plans to expand our production footprint with investments in automotive finishing capacity in Guthrie, Kentucky, in the U.S, and in Changzhou, China, respectively. Construction at these facilities are well underway and progressing in line with our expectations. We also acquired key operating assets that we historically leased at our Sierre, Switzerland rolling facility from Constellium.

In fiscal 2019, we entered into an agreement to acquire Aleris, a global supplier of rolled aluminum products. Upon consummation of the transaction, we expect to acquire Aleris' 13 production facilities across North America, Europe and Asia. We have obtained committed financing of up to \$2.25 billion, subject to customary closing conditions in connection with the anticipated closing, which continues to progress and is expected to close in the second quarter of fiscal 2020 (third quarter of calendar 2019), subject to customary closing conditions and approvals.

Also in fiscal 2019, we announced plans to expand our rolling, casting and recycling capacity in Pinda, Brazil to meet growing customer demand.

Along with our strong financial performance, we have continued our focus on further improving operational efficiencies and innovation. During fiscal 2019, we introduced the first aluminum sheet battery enclosure, opened Customer Solution Centers to better collaborate with our customers and developed new, high-strength alloys that will further enhance our existing portfolio of automotive products. We are also continuing to deliver on our purpose of shaping a sustainable world by increasing the amount of recycled content in our products and maximizing the advantages of sustainable, lightweight aluminum to benefit our customers, partners and the communities where we live and work.

BUSINESS AND INDUSTRY CLIMATE

Economic growth and material substitution continue to drive increasing global demand for aluminum and rolled products. With the exception of China where can sheet overcapacity and high competition remains, favorable market conditions and increasing customer preference for sustainable packaging options is driving higher demand for infinitely recyclable aluminum beverage cans and bottles. In fiscal 2019, we announced plans to expand rolling, casting and recycling capability in Pinda, Brazil to support this demand. Further, we announced the signing of a definitive agreement to acquire Aleris which will further diversify our global footprint and product portfolio. The acquisition continues to progress and remains subject to customary closing conditions and approvals.

Meanwhile, the demand for aluminum in the automotive industry continues to grow, which drove the investments we made in our automotive sheet finishing capacity in North America, Europe and Asia in recent years, and is driving the additional investments in Aleris, Guthrie, Kentucky (U.S.) and Changzhou, China. This demand has been primarily driven by the benefits that result from using light weight aluminum in vehicle structures and components, as companies respond to stricter government emissions and fuel economy regulations, while maintaining or improving vehicle safety and performance.

Key Sales and Shipment Trends

(in millions, except shipments which are in kt)

	Three Months Ended				Year Ended	Three Months Ended				Year Ended
	Jun 30, 2017	Sep 30, 2017	Dec 31, 2017	Mar 31, 2018	Mar 31, 2018	Jun 30, 2018	Sep 30, 2018	Dec 31, 2018	Mar 31, 2019	Mar 31, 2019
Net sales	\$ 2,669	\$ 2,794	\$ 2,933	\$ 3,066	\$ 11,462	\$ 3,097	\$ 3,136	\$ 3,009	\$ 3,084	\$ 12,326
Percentage increase (decrease) in net sales versus comparable previous year period	16 %	18 %	27 %	17 %	20 %	16 %	12 %	3 %	1 %	8 %
Rolled product shipments:										
North America	273	274	269	273	1,089	274	295	279	294	1,142
Europe	235	237	222	236	930	232	229	211	246	918
Asia	180	180	177	174	711	175	168	182	198	723
South America	110	131	146	136	523	126	126	142	143	537
Eliminations	(13)	(20)	(18)	(14)	(65)	(10)	(11)	(14)	(11)	(46)
Total	785	802	796	805	3,188	797	807	800	870	3,274
The following summarizes the percentage increase (decrease) in rolled product shipments versus the comparable previous year period:										
North America	13 %	9%	9 %	1%	8 %	— %	8 %	4 %	8%	5 %
Europe	(4)%	—%	(2)%	—%	(1)%	(1)%	(3)%	(5)%	4%	(1)%
Asia	1 %	2%	9 %	—%	3 %	(3)%	(7)%	3 %	14%	2 %
South America	7 %	8%	17 %	9%	10 %	15 %	(4)%	(3)%	5%	3 %
Total	4 %	4%	6 %	2%	4 %	2 %	1 %	1 %	8%	3 %

Business Model and Key Concepts

Conversion Business Model

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat rolled products have a price structure with three components: (i) a base aluminum price quoted off the LME; (ii) a local market premium; and (iii) a “conversion premium” to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. Base aluminum prices are typically driven by macroeconomic factors and global supply and demand for aluminum. The local market premiums tend to vary based on the supply and demand for metal in a particular region and associated transportation costs.

In North America, Europe and South America, we pass through local market premiums to our customers which are recorded through "Net sales." In Asia we purchase our metal inputs based on the LME and incur a local market premium; however, many of our competitors in this region price their metal off the Shanghai Futures Exchange, which does not include a local market premium, making it difficult for us to fully pass through this component of our metal input cost to some of our customers.

LME Base Aluminum Prices and Local Market Premiums

The average (based on the simple average of the monthly averages) and closing prices for aluminum set on the LME for the years ended March 31, 2019, 2018, and 2017 are as follows:

	Year Ended March 31,			Percent Change	
	2019	2018	2017	Year Ended March 31, 2019 versus March 31, 2018	Year Ended March 31, 2018 versus March 31, 2017
London Metal Exchange Prices					
Aluminum (per metric tonne, and presented in U.S. dollars):					
Closing cash price as of beginning of period	\$ 1,997	\$ 1,947	\$ 1,492	3 %	30%
Average cash price during period	\$ 2,035	\$ 2,045	\$ 1,688	— %	21%
Closing cash price as of end of period	\$ 1,900	\$ 1,997	\$ 1,947	(5)%	3%

For the years ended March 31, 2019, 2018, and 2017, the weighted average local market premium was as follows:

	Year Ended March 31,			Percent Change	
	2019	2018	2017	Year Ended March 31, 2019 versus March 31, 2018	Year Ended March 31, 2018 versus March 31, 2017
Weighted average local market premium (per metric tonne, and presented in U.S. dollars)	\$ 268	\$ 192	\$ 151	40%	27%

Metal Price Lag and Related Hedging Activities

Increases or decreases in the price of aluminum based on the average LME base aluminum prices and local market premiums directly impact "Net sales," "Cost of goods sold (exclusive of depreciation and amortization)" and working capital. The timing of these impacts varies based on contractual arrangements with customers and metal suppliers in each region. These timing impacts are referred to as metal price lag. Metal price lag exists due to: (i) the period of time between the pricing of our purchases of metal, holding and processing the metal, and the pricing of the sale of finished inventory to our customers, and (ii) certain customer contracts containing fixed forward price commitments which result in exposure to changes in metal prices for the period of time between when our sales price fixes and the sale actually occurs.

We use LME aluminum forward contracts to preserve our conversion margins and manage the timing differences associated with the LME base metal component of "Net sales," and "Cost of goods sold (exclusive of depreciation and amortization)." These derivatives directly hedge the economic risk of future LME base metal price fluctuations to better match the purchase price of metal with the sales price of metal. The majority of our local market premium hedging occurs in North America depending on market conditions; however, exposure here is not fully hedged. In our Europe, Asia and South America regions, the derivative market for local market premiums is not robust or efficient enough for us to offset the impacts of LMP price movements beyond a small volume. As a consequence, volatility in local market premiums can have a significant impact on our results of operations and cash flows.

We elect to apply hedge accounting to better match the recognition of gains or losses on certain derivative instruments with the recognition of the underlying exposure being hedged in the statement of operations. For undesignated metal derivatives, there are timing differences between the recognition of unrealized gains or losses on the derivatives and the recognition of the underlying exposure in the statement of operations. The recognition of unrealized gains and losses on undesignated metal derivative positions typically precedes inventory cost recognition, customer delivery and revenue recognition. The timing difference between the recognition of unrealized gains and losses on undesignated metal derivatives and cost or revenue recognition impacts "Income before income taxes" and "Net income." Gains and losses on metal derivative contracts are not recognized in "Segment income" until realized.

Foreign Currency and Related Hedging Activities

We operate a global business and conduct business in various currencies around the world. We have exposure to foreign currency risk as fluctuations in foreign exchange rates impact our operating results as we translate the operating results from various functional currencies into our U.S. dollar reporting currency at current average rates. We also record foreign exchange remeasurement gains and losses when business transactions are denominated in currencies other than the functional currency of that operation. Global economic uncertainty is contributing to higher levels of volatility among the currency pairs in which we conduct business. The following table presents the exchange rates as of the end of each period and the average of the month-end exchange rates for the years ended March 31, 2019, 2018, and 2017:

	Exchange Rate as of Year Ended March 31,			Average Exchange Rate Year Ended March 31,		
	2019	2018	2017	2019	2018	2017
U.S. dollar per Euro	1.123	1.230	1.068	1.155	1.180	1.098
Brazilian real per U.S. dollar	3.897	3.324	3.168	3.809	3.231	3.290
South Korean won per U.S. dollar	1,138	1,067	1,116	1,114	1,106	1,148
Canadian dollar per U.S. dollar	1.336	1.289	1.329	1.314	1.283	1.314
Swiss franc per Euro	1.118	1.178	1.069	1.142	1.139	1.084

Exchange rate movements have an impact on our operating results. In Europe, where we have predominantly local currency selling prices and operating costs, we benefit as the Euro strengthens, but are adversely affected as the Euro weakens. For our Swiss operations, where operating costs are incurred primarily in the Swiss franc and a large portion of revenues are denominated in the Euro, we benefit as the Franc weakens but are adversely affected as the Franc strengthens. In South Korea, where we have local currency operating costs and U.S. dollar denominated selling prices for exports, we benefit as the won weakens but are adversely affected as the won strengthens. In Brazil, where we have predominately U.S. dollar selling prices and local currency manufacturing costs, we benefit as the real weakens, but are adversely affected as the real strengthens. We use foreign exchange forward contracts and cross-currency swaps to manage our exposure arising from recorded assets and liabilities, firm commitments, and forecasted cash flows denominated in currencies other than the functional currency of certain operations, which include capital expenditures and net investment in foreign subsidiaries.

See *Segment Review* below for the impact of foreign currency on each of our segments.

Results of Operations

Year Ended March 31, 2019 Compared with the Year Ended March 31, 2018

"Net Sales" were \$12,326 million, an increase of 8%, driven by a 40% increase in average local market premiums and a 3% increase in flat rolled product shipments.

"Cost of goods sold (exclusive of depreciation and amortization)" was \$10,422 million, an increase of 7%, also related to higher average local market premiums and increases in flat rolled product shipments. Total metal input costs included in "Cost of goods sold (exclusive of depreciation and amortization)" increased \$522 million.

"Income before income taxes" was \$636 million compared to \$855 million. The following items also affected "Income before income taxes:"

- A "Gain on sale of a business, net" in the prior year of \$318 million, related to the sale of shares of UAL to Kobe and the deconsolidation of the remaining assets to form the equity method investment in the prior year;
- An increase in "Selling, general and administrative expenses" of \$36 million primarily related to increases in employment related costs, factoring expenses and other business and professional fees;
- "Business acquisition and other integration related costs" of \$33 million in the current year related to costs associated with our pending acquisition of Aleris;
- "Restructuring and impairment, net" decreased \$32 million related to the closure of certain non-core operations in Europe during the prior fiscal year; and
- "Interest expense and amortization of debt issuance costs" increased by \$13 million primarily due to increases in LIBOR and increased average borrowings;

We recognized \$202 million of tax expense, which resulted in an effective tax rate of 32%. This rate is due to tax losses in jurisdictions where we believe it more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded and income taxed at tax rates that differ from the 25% Canadian tax rate, including withholding taxes. We recognized \$233 million in the prior period, which resulted in an effective tax rate of 27%. This rate was due to a \$77 million expense resulting from the "Gain on sale of a business, net" and losses in jurisdictions where we believe it more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded, offset by a non-cash income tax benefit of \$19 million for the remeasurement of deferred tax assets and liabilities in accordance with the Tax Cuts and Jobs Act.

"Net income attributable to our common shareholder" was \$434 million compared to \$635 million primarily as a result of the factors discussed above.

Segment Review

Due in part to the regional nature of supply and demand of aluminum rolled products and in order to best serve our customers, we manage our activities on the basis of geographical regions and are organized under four operating segments: North America, Europe, Asia and South America.

The tables below illustrate selected segment financial information (in millions, except shipments which are in kt). For additional financial information related to our operating segments including the reconciliation of "Net income attributable to our common shareholder" to "Segment income," see Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information. In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP-based measures, "Eliminations and other" must adjust for proportional consolidation of each line item for our Logan affiliate because we consolidate 100% of the Logan joint venture for U.S. GAAP, but we manage our Logan affiliate on a proportionately consolidated basis, and eliminate intersegment shipments (in kt).

Selected Operating Results Year Ended March 31, 2019	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 4,581	\$ 3,376	\$ 2,190	\$ 2,091	\$ 88	\$ 12,326
Shipments						
Rolled products - third party	1,142	896	710	526	—	3,274
Rolled products - intersegment	—	22	13	11	(46)	—
Total rolled products	1,142	918	723	537	(46)	3,274
Non-rolled products	8	23	6	126	(18)	145
Total shipments	1,150	941	729	663	(64)	3,419

Selected Operating Results Year Ended March 31, 2018	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,951	\$ 3,447	\$ 2,110	\$ 1,931	\$ 23	\$ 11,462
Shipments						
Rolled products - third party	1,083	914	696	495	—	3,188
Rolled products - intersegment	6	16	15	28	(65)	—
Total rolled products	1,089	930	711	523	(65)	3,188
Non-rolled products	1	8	8	130	(2)	145
Total shipments	1,090	938	719	653	(67)	3,333

The following table reconciles changes in "Segment income" for the year ended March 31, 2018 to the year ended March 31, 2019 (in millions).

Changes in Segment income	North America	Europe	Asia	South America	Eliminations (A)	Total
Segment income - Year Ended March 31, 2018	\$ 474	\$ 219	\$ 167	\$ 363	\$ (8)	\$ 1,215
Volume	59	(16)	8	15	22	88
Conversion premium and product mix	42	(33)	10	1	(12)	8
Conversion costs	(9)	68	31	17	(9)	98
Foreign exchange	2	(1)	(15)	4	—	(10)
Selling, general & administrative and research & development costs (B)	(16)	(9)	(6)	(12)	10	(33)
Other changes	—	(2)	1	6	(3)	2
Segment income - Year Ended March 31, 2019	<u>\$ 552</u>	<u>\$ 226</u>	<u>\$ 196</u>	<u>\$ 394</u>	<u>\$ —</u>	<u>\$ 1,368</u>

(A) The recognition of "Segment income" by a region on an intersegment shipment could occur in a period prior to the recognition of "Segment income" on a consolidated basis, depending on the timing of when the inventory is sold to the third party customer. The "Eliminations" column adjusts regional "Segment income" for intersegment shipments that occur in a period prior to recognition of "Segment income" on a consolidated basis. The "Eliminations" column also reflects adjustments for changes in regional volume, conversion premium and product mix related to intersegment shipments for consolidation.

(B) Selling, general & administrative costs and research & development costs include costs incurred directly by each segment and all corporate related costs.

North America

"Net sales" increased \$630 million, or 16%, primarily due to higher can and automotive shipments.

"Segment income" was \$552 million, an increase of 16%, primarily due to higher volumes, favorable pricing and product mix coupled with favorable metal costs and scrap spreads partially offset by increased selling, general and administrative expenses and operating costs.

Europe

"Net sales" decreased \$71 million, or 2%, primarily due to lower automotive and specialty shipments, partially offset by higher can shipments.

"Segment income" was \$226 million, an increase of 3%, primarily due to favorable metal mix and operating efficiencies partially offset by unfavorable can and automotive pricing.

Asia

"Net sales" increased \$80 million, or 4%, primarily due to higher can shipments partially offset by lower specialty shipments.

"Segment income" was \$196 million, an increase of 17%, primarily due to favorable metal mix and scrap spreads, favorable product mix and higher volumes partially offset by unfavorable foreign currency impacts.

South America

"Net sales" increased \$160 million, or 8%, due to higher can shipments partially offset by lower specialty shipments and lower pricing.

"Segment income" was \$394 million, an increase of 9%, primarily due to favorable metal mix and scrap spreads coupled with higher volume partially offset by increased selling, general and administrative expenses.

Results of Operations

Year Ended March 31, 2018 Compared with the Year Ended March 31, 2017

"Net Sales" were \$11,462 million, an increase of 20%, driven by a 30% increase in average base aluminum prices, a 4% increase in flat rolled product shipments, and a 27% increase in local market premiums.

"Cost of goods sold (exclusive of depreciation and amortization)" was \$9,719 million, an increase of 21%, primarily due to an increase in flat rolled product shipments and higher average aluminum prices. Total metal input costs included in "Cost of goods sold (exclusive of depreciation and amortization)" increased \$1,521 million.

"Income before income taxes" for the year ended March 31, 2018 was \$855 million, compared to \$197 million for the year ended March 31, 2017. In addition to the factors noted above, the following items affected "Income before income taxes:"

- An increase in "Selling, general and administrative expenses" of \$68 million primarily related to an increase in the fair value of Long Term Incentive Plan (LTIP) awards, increases in factoring expense and professional fees;
- A decline in interest expense of \$39 million due to the refinancing of the 2017 Notes, 2020 Notes and Term Loan at lower interest rates;
- "Loss on extinguishment of debt" in the prior year of \$134 million related to the extinguishment of the 2017 Notes, 2020 Notes and Term Loan;
- A gain on sale of a business of \$318 million, related to the sale of shares of UAL to Kobe and the deconsolidation of the remaining assets to form the equity method investment in September 2017. This gain was compared to a loss of \$27 million in the prior fiscal year, which was recognized on the sale of our interest in Aluminium Company of Malaysia Berhad (ALCOM);
- "Restructuring and impairment, net" of \$34 million primarily related to restructuring actions in Europe, compared to \$10 million of restructuring expenses in the prior fiscal year, related to severance and other charges across our regions; and
- Increased stability in the current year local market premiums, resulted in a \$4 million metal price lag gain, compared to a \$31 million metal price lag loss during the prior fiscal year.

We recognized \$233 million of tax expense for the year ended March 31, 2018, which resulted in an effective tax rate of 27%. This rate is due to a \$77 million expense on the sale of a business, tax losses in jurisdictions where we believe it more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded, offset by a non-cash income tax benefit of \$19 million for the remeasurement of deferred tax assets and liabilities in accordance with the Tax Cuts and Jobs Act. We recognized \$151 million of tax expense for the year ended March 31, 2017, primarily due to tax losses in jurisdictions where we believe it to be more likely than not that we will not be able to utilize those losses and therefore have a valuation allowance recorded and the net impact of foreign exchange translation and remeasurement of deferred income taxes, offset by dividends not subject to tax.

We reported "Net income attributable to our common shareholder" of \$635 million for the current year, compared to "Net income attributable to our common shareholder" of \$45 million for the prior year, primarily as a result of the factors discussed above.

Segment Review

The tables below illustrate selected segment financial information (in millions, except shipments which are in kt). For additional financial information related to our operating segments including the reconciliation of "Net income attributable to our common shareholder" to Segment income, see Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information. In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP-based measures, "Eliminations and other" must adjust for proportional consolidation of each line item for our Logan affiliate because we consolidate 100% of the Logan joint venture for U.S. GAAP, but we manage our Logan affiliate on a proportionately consolidated basis, and eliminate intersegment shipments (in kt).

Selected Operating Results Year Ended March 31, 2018	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,951	\$ 3,447	\$ 2,110	\$ 1,931	\$ 23	\$ 11,462
Shipments						
Rolled products - third party	1,083	914	696	495	—	3,188
Rolled products - intersegment	6	16	15	28	(65)	—
Total rolled products	1,089	930	711	523	(65)	3,188
Non-rolled products	1	8	8	130	(2)	145
Total shipments	1,090	938	719	653	(67)	3,333

Selected Operating Results Year Ended March 31, 2017	North America	Europe	Asia	South America	Eliminations and other	Total
Net sales	\$ 3,228	\$ 2,968	\$ 1,791	\$ 1,510	\$ 94	\$ 9,591
Shipments						
Rolled products - third party	1,009	927	682	449	—	3,067
Rolled products - intersegment	1	16	8	25	(50)	—
Total rolled products	1,010	943	690	474	(50)	3,067
Non-rolled products	4	8	9	88	—	109
Total shipments	1,014	951	699	562	(50)	3,176

The following table reconciles changes in "Segment income" for the year ended March 31, 2017 to the year ended March 31, 2018 (in millions).

Changes in Segment income	North America	Europe	Asia	South America	Eliminations (A)	Total
Segment income - Year Ended March 31, 2017	\$ 380	\$ 208	\$ 163	\$ 337	\$ (3)	\$ 1,085
Volume	84	(15)	24	59	(13)	139
Conversion premium and product mix	10	9	(22)	(45)	9	(39)
Conversion costs	22	6	9	24	4	65
Foreign exchange	1	25	1	(12)	—	15
Selling, general & administrative and research & development costs (B)	(28)	(12)	(2)	(25)	(5)	(72)
Other changes (C)	5	(2)	(6)	25	—	22
Segment income - Year Ended March 31, 2018	<u>\$ 474</u>	<u>\$ 219</u>	<u>\$ 167</u>	<u>\$ 363</u>	<u>\$ (8)</u>	<u>\$ 1,215</u>

(A) The recognition of "Segment income" by a region on an intersegment shipment could occur in a period prior to the recognition of "Segment income" on a consolidated basis, depending on the timing of when the inventory is sold to the third party customer. The "Eliminations" column adjusts regional "Segment income" for intersegment shipments that occur in a period prior to recognition of "Segment income" on a consolidated basis. The "Eliminations" column also reflects adjustments for changes in regional volume, conversion premium and product mix, and conversion costs related to intersegment shipments for consolidation.

(B) Selling, general & administrative costs and research & development costs include costs incurred directly by each segment and all corporate related costs.

(C) In relation to the South America segment, this line includes items such as the State of Espirito Santo indirect tax incentive (ICMS) for companies who fulfill certain requirements. According to this incentive, the Company can recognize a presumed ICMS credit, thus reducing the amounts due to the State. The mentioned incentive is recorded in our consolidated results of operations.

North America

"Net sales" increased \$723 million, or 22%, primarily due to higher average aluminum prices and higher can and automotive shipments.

"Segment income" was \$474 million, an increase of 25%, primarily due to favorable operating and metal costs as well as higher automotive and can volumes, higher pricing and favorable product mix as a result of automotive growth. These positive factors were partially offset by unfavorable selling, general and administrative costs.

Europe

"Net sales" increased \$479 million, or 16%, primarily due to higher average aluminum prices and higher automotive shipments; partially offset by lower can and specialty shipments.

"Segment income" was \$219 million, an increase of 5%, primarily due to favorable product mix as a result of our portfolio optimization efforts, favorable currency impact, higher automotive volumes and favorable cost absorption. These positive factors were partially offset by lower can and specialties volumes, and higher selling, general and administrative costs.

Asia

"Net sales" increased \$319 million, or 18%, due to higher average aluminum prices and higher can and automotive shipments; partially offset by lower specialty shipments.

"Segment income" was \$167 million, a increase of 2%, primarily due to higher automotive and can shipments and favorable operating and metal costs, partially offset by lower can pricing and product mix.

South America

“Net sales” increased \$421 million, or 28%, due to higher average aluminum prices and higher specialties and can shipments.

“Segment income” was \$363 million, an increase of 8%, primarily due to higher can and specialties volumes and favorable operating and metal costs. These positive factors were partially offset by unfavorable price and product mix and higher selling, general and administrative costs.

Liquidity and Capital Resources

Our primary liquidity sources are cash flows from operations, working capital management, cash and liquidity under our debt agreements. Our recent business investments were funded through cash flows generated by our operations and a combination of local financing and our senior secured credit facilities. Most of our recent strategic expansion projects are operating close to full capacity and are generating additional operating cash flow. We expect to be able to fund our continued expansions, service our debt obligations, and provide sufficient liquidity to operate our business through one or more of the following: the generation of operating cash flows, working capital management, our existing debt facilities (including refinancing) and new debt issuances, as necessary.

In fiscal 2018 and fiscal 2019, we announced plans to expand our production footprint with investments in automotive finishing capacity in Guthrie, Kentucky (United States) and Changzhou, China, respectively. In fiscal 2019, we announced plans to expand our rolling, casting and recycling capacity in Pinda, Brazil. Further, we completed the acquisition of operating assets that we historically leased at our Sierre, Switzerland rolling facility from Constellium for €197.5 million (approximately \$231 million). We simultaneously acquired a 50% ownership for €2.5 million (approximately \$3 million) in a service company (AluInfra) that is jointly owned and operated by both Novelis and Constellium to provide certain services to the parties at the Sierre facility.

Also in fiscal 2019, we entered into an agreement to acquire Aleris, a global supplier of rolled aluminum products. Upon consummation of the transaction, we expect to acquire Aleris' 13 production facilities across North America, Europe and Asia. We have obtained committed financing of up to \$2.25 billion, subject to customary closing conditions in connection with the anticipated closing, which continues to progress and is expected to close in the second quarter of fiscal 2020, subject to customary closing conditions and approvals.

Non-Guarantor Information

As of March 31, 2019, the Company's subsidiaries that are not guarantors represented the following approximate percentages of (a) net sales, (b) Adjusted EBITDA (segment income), and (c) total assets of the Company, on a consolidated basis (including intercompany balances):

Item Description	Ratio
Consolidated net sales represented by net sales to third parties by non-guarantor subsidiaries (for the year ended March 31, 2019)	20%
Consolidated Adjusted EBITDA represented by the non-guarantor subsidiaries (for the year ended March 31, 2019)	13%
Consolidated assets are owned by non-guarantor subsidiaries (as of March 31, 2019)	17%

In addition, for the years ended March 31, 2019 and March 31, 2018, the Company's subsidiaries that are not guarantors had net sales of \$2.9 billion and \$3.0 billion, respectively, and, as of March 31, 2019, those subsidiaries had assets of \$2.1 billion and debt and other liabilities of \$1.4 billion (including inter-company balances).

Available Liquidity

Our available liquidity as of March 31, 2019 and 2018 is as follows (in millions):

	March 31,	
	2019	2018
Cash and cash equivalents	\$ 950	\$ 920
Availability under committed credit facilities (A)	897	998
Total available liquidity	\$ 1,847	\$ 1,918

(A) Our availability under committed credit facilities does not include the committed financing for Aleris.

The decrease in total available liquidity is primarily attributable to acquisition related costs of \$239 million for the purchase of operating assets at Sierre, Switzerland that were historically leased, net payments on short-term and long-term borrowings, and reductions in credit facility lines. These decreases were partially offset by positive free cash flow of \$408 million. See Note 11 — Debt for more details about our availability under committed credit facilities as well as committed financing relating to the proposed Aleris acquisition.

The “Cash and cash equivalents” balance above includes cash held in foreign countries in which we operate. As of March 31, 2019, we held \$21 million of “Cash and cash equivalents” in Canada, in which we are incorporated, with the rest held in other countries in which we operate. As of March 31, 2019, we held \$545 million of cash in jurisdictions for which we have asserted that earnings are permanently reinvested and we plan to continue to fund operations and local expansions with cash held in those jurisdictions. Cash held outside of Canada is free from significant restrictions that would prevent the cash from being accessed to meet the Company's liquidity needs including, if necessary, to fund operations and service debt obligations in Canada. Upon the repatriation of any earnings to Canada, in the form of dividends or otherwise, we could be subject to Canadian income taxes (subject to adjustment for foreign taxes paid and the utilization of the large cumulative net operating losses we have in Canada) and withholding taxes payable to the various foreign jurisdictions. As of March 31, 2019, we do not believe adverse tax consequences exist that restrict our use of “Cash or cash equivalents” in a material manner.

We use derivative contracts to manage risk as well as liquidity. Under our terms of credit with counterparties to our derivative contracts, we do not have any material margin call exposure. No material amounts have been posted by Novelis nor do we hold any material amounts of margin posted by our counterparties. We settle derivative contracts in advance of billing on the underlying physical inventory and collecting payment from our customers, which temporarily impacts our liquidity position. The lag between derivative settlement and customer collection typically ranges from 30 to 90 days.

Free Cash Flow

Refer to "Non-GAAP Financial Measures" for our definition of Free Cash Flow.

The following table shows the “Free cash flow” for the year ended March 31, 2019, 2018 and 2017, the change between periods, as well as the ending balances of cash and cash equivalents (in millions).

	Year Ended March 31,			Change	
	2019	2018	2017	2019 versus 2018	2018 versus 2017
Net cash provided by operating activities	\$ 728	\$ 573	\$ 563	\$ 155	\$ 10
Net cash (used in) provided by investing activities	(557)	96	(200)	(653)	296
Plus: Cash used in the acquisition of assets under a capital lease (A)	239	—	—	239	—
Less: Proceeds from sales of assets and business, net of transactions fees, cash income taxes and hedging (B)	(2)	(263)	(2)	261	(261)
Free cash flow	\$ 408	\$ 406	\$ 361	\$ 2	\$ 45
Ending cash and cash equivalents	\$ 950	\$ 920	\$ 606	\$ 30	\$ 314

(A) This line item includes \$239 million of outflows related to the acquisition of operating assets that we historically leased at our Sierre, Switzerland rolling facility during the year ended March 31, 2019. The impact is recognized as "Acquisition of assets under a capital lease".

(B) This line item includes the proceeds from the sale of shares in Ulsan Aluminum Ltd., to Kobe during the year ended March 31, 2018 in the amount of \$314 million, net of \$42 million and \$11 million, in cash taxes and transaction fees paid, respectively. This line item also includes "Outflows from the sale of a business, net of transaction fees" which is comprised of cash of \$13 million held by ALCOM, which was a consolidated entity sold during fiscal 2017.

Operating Activities

The increase in net cash provided by operating activities was primarily related to higher "Segment income". The following summarizes changes in working capital accounts (in millions).

	Year Ended March 31,			Change	
	2019	2018	2017	2019 versus 2018	2018 versus 2017
Net cash (used in) provided by operating activities due to changes in working capital:					
Accounts receivable	\$ (71)	\$ (415)	\$ (166)	\$ 344	\$ (249)
Inventories	32	(151)	(193)	183	42
Accounts payable	(74)	336	253	(410)	83
Other current assets and liabilities	31	16	17	15	(1)
Net change in working capital	<u>\$ (82)</u>	<u>\$ (214)</u>	<u>\$ (89)</u>	<u>\$ 132</u>	<u>\$ (125)</u>

Working capital improvements in the current period were primarily due to favorable changes in inventories due to increased sales as well as favorable changes in other current assets and liabilities. The lower quantities of inventory on hand is the result of increased shipments due to customer demand. These factors were offset by the timing of cash outflows related to accounts payable and lower base aluminum prices.

In the prior periods, working capital was primarily impacted by increases in "Accounts receivable, net" due to the timing of cash collections on certain receivables' balances coupled with an increase in sales and increased average metal prices. Additionally, higher quantities of inventory on hand was the result of capacity expansions and longer supply chains to support the automotive sector. Favorable accounts payable impacts were primarily related to the timing of payments to vendors.

Investing Activities

The following table presents information regarding our "Net cash (used in) provided by investing activities" (in millions).

	Year Ended March 31,			Change	
	2019	2018	2017	2019 versus 2018	2018 versus 2017
Capital expenditures	\$ (351)	\$ (226)	\$ (224)	\$ (125)	\$ (2)
Acquisition of assets under a capital lease	(239)	—	—	(239)	—
Proceeds (outflows) from settlement of derivative instruments, net	7	(23)	8	30	(31)
Proceeds from sales of assets, third party, net of transaction fees and hedging	2	2	4	—	(2)
Proceeds (outflows) from the sale of a business	—	314	(2)	(314)	316
Proceeds from investment in and advances to non-consolidated affiliates, net	12	16	2	(4)	14
Other	12	13	12	(1)	1
Net cash (used in) provided by investing activities	<u>\$ (557)</u>	<u>\$ 96</u>	<u>\$ (200)</u>	<u>\$ (653)</u>	<u>\$ 296</u>

For the year ended March 31, 2019, "Net cash used in investing activities" was primarily attributable to increased "Capital expenditures" related to strategic investments and the acquisition of operating assets that we historically leased at our Sierre, Switzerland rolling facility recognized as "Acquisition of assets under a capital lease". Additionally, in the prior period, we received "Proceeds from the sale of a business" in the amount of \$314 million due to the sale of shares in UAL.

Financing Activities

The following table presents information regarding our “Net cash used in financing activities” (in millions).

	Year Ended March 31,			Change	
	2019	2018	2017	2019 versus 2018	2018 versus 2017
Proceeds from issuance of long-term and short-term borrowings	\$ —	\$ —	\$ 4,572	\$ —	\$ (4,572)
Principal payments of long-term and short-term borrowings	(112)	(174)	(4,477)	62	4,303
Revolving credit facilities and other, net	(2)	(211)	(229)	209	18
Debt issuance costs	(4)	(5)	(191)	1	186
Net cash used in financing activities	\$ (118)	\$ (390)	\$ (325)	\$ 272	\$ (65)

Year Ended March 31, 2019

During the year ended March 31, 2019, there were no issuances of long-term borrowings. We made principal repayments of \$90 million in Korean long-term debt, \$18 million on our Term Loan Facility, \$3 million on capital leases and \$1 million in other principal repayments. We incurred \$4 million in debt issuance costs.

Year Ended March 31, 2018

During the year ended March 31, 2018, there were no issuances of long-term borrowings. We made principal repayments of \$50 million on short-term loans in Brazil, \$18 million on our Term Loan Facility, \$97 million in Korean long-term debt, \$8 million on capital leases and \$1 million in other principal repayments. The net cash repayments from our credit facilities balance is related to payments of \$185 million on our ABL Revolver and \$26 million on our China credit facility.

Year Ended March 31, 2017

During the year ended March 31, 2017, we received proceeds of \$4.5 billion related to the refinancing of the Term Loan, 2017 and 2020 Notes as well as issuances of new loans in Brazil and Vietnam, and other locations of \$81 million, \$40 million, and \$2 million, respectively. Additionally, we made principal repayments of \$1.8 billion on our Term Loan Facility related to the refinancing, \$1.1 billion and \$1.4 billion on our 2017 and 2020 Notes, respectively, \$108 million on short-term loans in Brazil, \$49 million on Vietnam principal repayments, \$17 million in Korean loan repayments, \$10 million on capital leases, and \$5 million in other principal repayments. The change in our credit facilities balance is related to net incremental repayments of \$196 million on our ABL Revolver partially offset by net proceeds of \$16 million in our China credit facilities. As of March 31, 2017, our short-term borrowings were \$294 million consisting of \$184 million of loans under our ABL Revolver, \$50 million in Novelis Brazil loans, \$59 million in Novelis China loans, and \$1 million in other short-term borrowings. The weighted average interest rate on our total short-term borrowings was 2.92% as of March 31, 2017. As of March 31, 2017, \$20 million of the ABL Revolver was utilized for letters of credit, reducing our availability under that facility.

During the year ended March 31, 2017, we incurred costs of \$191 million related to the refinancing of our Term Loan and Senior Notes facilities.

OFF-BALANCE SHEET ARRANGEMENTS

In accordance with SEC rules, the following qualify as off-balance sheet arrangements:

- any obligation under certain derivative instruments;
- any obligation under certain guarantees or contracts;
- a retained or contingent interest in assets transferred to an unconsolidated entity or similar entity or similar arrangement that serves as credit, liquidity or market risk support to that entity for such assets; and
- any obligation under a material variable interest held by the registrant in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the registrant, or engages in leasing, hedging or research and development services with the registrant.

The following discussion addresses the applicable off-balance sheet items for our Company.

Derivative Instruments

See Note 15 — Financial Instruments and Commodity Contracts to our accompanying consolidated financial statements for a full description of derivative instruments.

Guarantees of Indebtedness

We have issued guarantees on behalf of certain of our subsidiaries. The indebtedness guaranteed is for trade accounts payable to third parties. Some of the guarantees have annual terms while others have no expiration and have termination notice requirements. Neither we nor any of our subsidiaries holds any assets of any third parties as collateral to offset the potential settlement of these guarantees. Since we consolidate wholly-owned and majority-owned subsidiaries in our consolidated financial statements, all liabilities associated with trade payables and debt facilities for these entities are already included in our consolidated balance sheets.

See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for details on a guarantee of indebtedness to Alunorf, our non-consolidated affiliate.

Factoring of Trade Receivables

See Note 4 — Accounts Receivable for a summary of disclosures of factored financial amounts.

Other

As part of our ongoing business, we do not participate in transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as special purpose entities (SPEs), which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of March 31, 2019 and 2018, we were not involved in any unconsolidated SPE transactions.

CONTRACTUAL OBLIGATIONS

We have future obligations under various contracts relating to debt and interest payments, capital and operating leases, long-term purchase obligations, and postretirement benefit plans. The following table presents our estimated future payments under contractual obligations that exist as of March 31, 2019, based on undiscounted amounts (in millions). The future cash flow commitments we may have related to derivative contracts are excluded from our contractual obligations table as these are fair value measurements determined at an interim date within the contractual term of the arrangement and, accordingly, do not represent the ultimate contractual obligation (which could ultimately become a receivable). As a result, the timing and amount of the ultimate future cash flows related to our derivative contracts, including the \$94 million of derivative liabilities recorded on our balance sheet as of March 31, 2019, are uncertain. In addition, stock compensation is excluded from the table below as these are fair value measurements determined at an interim date and is not considered a contractual obligation. Furthermore, due to the difficulty in determining the timing of settlements, the table excludes \$24 million of uncertain tax positions. See Note 19 — Income Taxes to our accompanying consolidated financial statements.

	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years	Total
Debt (A)	\$ 58	\$ 39	\$ 1,706	\$ 2,649	\$ 4,452
Interest on long-term debt (B)	206	410	324	237	1,177
Capital leases (C)	—	—	—	1	1
Operating leases (D)	29	38	22	17	106
Purchase obligations (E)	3,371	3,742	742	29	7,884
Unfunded pension plan benefits (F)	12	21	22	59	114
Other post-employment benefits (F)	7	16	19	55	97
Funded pension plans (F)	65	149	162	468	844
Total	\$ 3,748	\$ 4,415	\$ 2,997	\$ 3,515	\$ 14,675

- (A) Includes only principal payments on our Senior Notes, Term Loans, revolving credit facilities and notes payable to banks and others. These amounts exclude payments under capital lease obligations.
- (B) Interest on our fixed rate debt is estimated using the stated interest rate. Interest on our variable-rate debt is estimated using the rate in effect as of March 31, 2019. Actual future interest payments may differ from these amounts based on changes in floating interest rates or other factors or events. Excluded from these amounts are interest related to capital lease obligations, the amortization of debt issuance and other costs related to indebtedness.
- (C) Includes both principal and interest components of future minimum capital lease payments. Excluded from these amounts are insurance, taxes and maintenance associated with the property.
- (D) Includes the minimum lease payments for non-cancelable leases for property and equipment used in our operations. We do not have any operating leases with contingent rents. Excluded from these amounts are insurance, taxes and maintenance associated with the properties and equipment.
- (E) Includes agreements to purchase goods (including raw materials, and capital expenditures) and services that are enforceable and legally binding on us, and that specify all significant terms. Some of our raw material purchase contracts have minimum annual volume requirements. In these cases, we estimate our future purchase obligations using annual minimum volumes and costs per unit that are in effect as of March 31, 2019. Due to volatility in the cost of our raw materials, actual amounts paid in the future may differ from these amounts. Excluded from these amounts are the impact of any derivative instruments and any early contract termination fees, such as those typically present in energy contracts.
- (F) Obligations for postretirement benefit plans are estimated based on actuarial estimates using benefit assumptions for, among other factors, discount rates, rates of compensation increases and health care cost trends. Payments for pension plan benefits and other post-employment benefits are estimated through 2029.

RETURN OF CAPITAL

Payments to our shareholder are at the discretion of the board of directors and will depend on, among other things, our financial resources, cash flows generated by our business, our cash requirements, restrictions under the instruments governing our indebtedness, being in compliance with the appropriate indentures and covenants under the instruments that govern our indebtedness and other relevant factors.

ENVIRONMENT, HEALTH AND SAFETY

We strive to be a leader in environment, health and safety (EHS) standards. Our EHS system is aligned with ISO 14001, an international environmental management standard, and OHSAS 18001, an international occupational health and safety management standard. As of March 31, 2019 and 2018, 23 of our facilities were OHSAS 18001 certified. As of March 31, 2019 and 2018, 24 of our facilities were ISO 14001 certified. In addition, 23 of our facilities are certified to one of the following quality standards: ISO 9001, TS 16949, IATF 16949.

Our expenditures for environmental protection (including estimated and probable environmental remediation costs as well as general environmental protection costs at our facilities) and the betterment of working conditions in our facilities were \$14 million in fiscal 2019, of which \$10 million was expensed and \$4 million capitalized. We expect these expenditures will be approximately \$17 million in fiscal 2020, of which we estimate \$11 million will be expensed and \$6 million capitalized. Generally, expenses for environmental protection are recorded in "Cost of goods sold (exclusive of depreciation and amortization)." However, significant remediation costs that are not associated with on-going operations are recorded in "Restructuring and impairment, net."

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Our discussion and analysis of our results of operations, liquidity and capital resources are based on our consolidated financial statements which have been prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP). In connection with the preparation of our consolidated financial statements, we are required to make assumptions and estimates about future events, and apply judgments that affect the reported amounts of assets, liabilities, revenue, expenses, and the related disclosures. We base our assumptions, estimates and judgments on historical experience, current trends and other factors we believe to be relevant at the time we prepare our consolidated financial statements. On a regular basis, we review the accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with U.S. GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material.

Our significant accounting policies are discussed in Note 1 — Business and Summary of Significant Accounting Policies to our accompanying consolidated financial statements. We believe the following accounting policies are the most critical to aid in fully understanding and evaluating our reported financial results, as they require management to make difficult, subjective or complex judgments, and to make estimates about the effect of matters that are inherently uncertain. Although management believes that the estimates and judgments discussed herein are reasonable, actual results could differ, which could result in gains or losses that could be material. We have reviewed these critical accounting policies and related disclosures with the Audit Committee of our board of directors.

Derivative Financial Instruments

We hold derivatives for risk management purposes and not for trading. We use derivatives to mitigate uncertainty and volatility caused by underlying exposures to metal prices, foreign exchange rates, interest rates, and energy prices. The fair values of all derivative instruments are recognized as assets or liabilities at the balance sheet date and are reported gross.

The majority of our derivative contracts are valued using industry-standard models that use observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices for foreign exchange rates. See Note 15 — Financial Instruments and Commodity Contracts and Note 17 — Fair Value Measurements to our accompanying consolidated financial statements for discussion on fair value of derivative instruments.

We may be exposed to losses in the future if the counterparties to our derivative contracts fail to perform. We are satisfied that the risk of such non-performance is remote due to our monitoring of credit exposures. Additionally, we enter into master netting agreements with contractual provisions that allow for netting of counterparty positions in case of default, and we do not face credit contingent provisions that would result in the posting of collateral.

For derivatives designated as fair value hedges, we assess hedge effectiveness by formally evaluating the high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. The changes in the fair values of the underlying hedged items are reported in other current and noncurrent assets and liabilities in the consolidated balance sheets. Changes in the fair values of these derivatives and underlying hedged items generally offset and the effective portion is recorded in "Net sales" consistent with the underlying hedged item and the net ineffectiveness is recorded in "Other (income) expense, net."

For derivatives designated as cash flow hedges or net investment hedges, we assess hedge effectiveness by formally evaluating the high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The effective portion of gain or loss on the derivative is included in Other Comprehensive Income (Loss) and reclassified to earnings in the period in which earnings are impacted by the hedged items or in the period that the transaction becomes probable of not occurring. Gains or losses representing reclassifications of OCI to earnings are recognized in the line item most reflective of the underlying risk exposure. We exclude the time value component of foreign currency and aluminum price risk hedges when measuring and assessing ineffectiveness to align our accounting policy with risk management objectives when it is necessary. If at any time during the life of a cash flow hedge relationship we determine that the relationship is no longer effective, the derivative will no longer be designated as a cash flow hedge and future gains or losses on the derivative will be recognized in "Other (income) expense, net."

For all derivatives designated as hedging relationships, gains or losses representing hedge ineffectiveness or amounts excluded from effectiveness testing are recognized in "Other (income) expense, net" in our current period earnings. If no hedging relationship is designated, gains or losses are recognized in "Other (income) expense, net" in our current period earnings.

Consistent with the cash flows from the underlying risk exposure, we classify cash settlement amounts associated with designated derivatives as part of either operating or investing activities in the consolidated statements of cash flows. If no hedging relationship is designated, we classify cash settlement amounts as part of investing activities in the consolidated statement of cash flows.

Impairment of Goodwill

Goodwill represents the excess of the purchase price over the fair value of the identifiable net assets of acquired companies. As a result of Hindalco's indirect purchase of Novelis, we estimated fair value of the identifiable net assets using a number of factors, including the application of multiples and discounted cash flow estimates. The carrying value of goodwill for each of our reporting units, which is tested for impairment annually, is as follows (in millions):

	As of March 31, 2019	
North America	\$	285
Europe		181
South America		141
	\$	607

Goodwill is not amortized; instead, it is tested for impairment annually or more frequently if indicators of impairment exist. On an ongoing basis, absent any impairment indicators, we perform our goodwill impairment testing as of the last day of February of each fiscal year. We do not aggregate components of operating segments to arrive at our reporting units, and as such our reporting units are the same as our operating segments.

ASC 350, Intangibles - *Goodwill* (ASC 715) provides an entity the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If an entity elects to perform a qualitative assessment and determines that an impairment is more likely than not, the entity is then required to perform the existing two-step quantitative impairment test, otherwise no further analysis is required. An entity also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment review for a reporting unit should be the same whether an entity chooses to perform the qualitative assessment or proceeds directly to the two-step quantitative impairment test.

For our fiscal year 2019 test, we elected to perform the two-step quantitative impairment test, where step one compares the fair value of each reporting unit to its carrying amount, and if step one indicates that the carrying value of a reporting unit exceeds the fair value, step two is performed to measure the amount of impairment, if any. For purposes of our step one analysis, our estimate of fair value for each reporting unit as of the testing date is based on a weighted average of the value indication from income and market approach. The approach to determining fair value for all reporting units is consistent given the similarity of our operations in each region.

Under the income approach, the fair value of each reporting unit is based on the present value of estimated future cash flows. The income approach is dependent on a number of significant management assumptions including sales volumes and prices, costs to produce, capital spending, working capital changes and the discount rate. We estimate future cash flows for each of our reporting units based on our projections for the respective reporting unit. These projected cash flows are discounted to the present value using a weighted average cost of capital (discount rate). The discount rate is commensurate with the risk inherent in the projected cash flows and reflects the rate of return required by an investor in the current economic conditions. For our annual impairment test, we used a discount rate of 9% for all reporting units. An increase or decrease of 0.5% in the discount rate would have impacted the estimated fair value of each reporting unit by approximately \$150-\$400 million, depending on the relative size of the reporting unit. Additionally, an increase or decrease of 0.5% in the terminal year growth rate assumption would have impacted the estimated fair value of each reporting unit by approximately \$100-\$275 million, depending on the relative size of the reporting unit. The projections are based on both past performance and the expectations of future performance and assumptions used in our current operating plan. We use specific revenue growth assumptions for each reporting unit based on history and economic conditions, and the terminal year revenue growth assumptions were approximately 2.25%.

Under the market approach, the fair value of each reporting unit is determined based upon comparisons to public companies engaged in similar businesses. The market approach is dependent on a number of significant assumptions including selection of multiples and control premium.

As a result of our annual goodwill impairment test for the year ended March 31, 2019, no goodwill impairment was identified. The fair values of the reporting units exceeded their respective carrying amounts as of the last day of February in fiscal 2019 by 179% for North America, by 38% for Europe and by 196% for South America.

Equity Investments

We invest in certain joint ventures and consortiums. We use the equity method to account for our investments in entities that we do not control, but where we have the ability to exercise significant influence over operating and financial policies. We exercise judgment to determine which investments should be accounted for using the equity method and which investments should be consolidated.

As a result of Hindalco's indirect purchase of Novelis, "Investment in and advances to equity method affiliates" was adjusted to reflect fair value as of May 16, 2007 for our Alunorf affiliate. We review these investments for impairment whenever certain indicators are present suggesting that the carrying value of an investment is not recoverable. This analysis requires a significant amount of judgment to identify events or circumstances indicating that an investment may be impaired. Once an impairment indicator is identified, we must determine if an impairment exists, and if so, whether the impairment is other than temporary, in which case the investment would be written down to its estimated fair value.

Impairment of Long Lived Assets and Other Intangible Assets

We assess the recoverability of long-lived assets and finite-lived intangible assets whenever events or changes in circumstances indicate that we may not be able to recover the asset's carrying amount. Such events or circumstances include, but are not limited to, a significant decrease in the fair value of the underlying business or a change in utilization of property and equipment.

We group assets to test for impairment at the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. These levels are dependent upon an asset's usage, which may be on an individual asset level or aggregated at a higher level including a region-wide grouping. The metal flow and management of supply within our regions creates an interdependency of the plants within a region on one another to generate cash flows. Accordingly, under normal operating conditions, our assets are grouped on a region-wide basis for impairment testing. Any expected change in usage, retirement, disposal or sale of an individual asset or group of assets below the region level which would generate a separate cash flow stream outside of normal operations could result in grouping assets below the region level for impairment testing.

When evaluating long-lived assets and finite-lived intangible assets for potential impairment, we first compare the carrying value of the asset to the asset's estimated future net cash flows (undiscounted and without interest charges). If the estimated future net cash flows are less than the carrying value of the asset, we calculate and recognize an impairment loss. If we recognize an impairment loss, the carrying amount of the asset is adjusted to fair value based on the discounted estimated future net cash flows and will be its new cost basis. For a depreciable long-lived asset, the new cost basis will be depreciated over the remaining useful life of that asset. For an amortizable intangible asset, the new cost basis will be amortized over the remaining useful life of the asset.

Our impairment loss calculations require management to apply judgments in estimating future cash flows to determine asset fair values, including forecasting useful lives of the assets and selecting the discount rate that represents the risk inherent in future cash flows. Impairment charges are recorded in "Restructuring and impairment, net" in our consolidated statement of operations. See Note 3 — Restructuring and Impairment for details on asset impairments for the years ended March 31, 2019, 2018, and 2017.

If actual results are not consistent with our assumptions and judgments used in estimating future cash flows and asset fair values, we may be exposed to additional impairment losses that could be material to our results of operations.

Pension and Other Postretirement Plans

We account for our pensions and other postretirement benefits in accordance with ASC 715, *Compensation — Retirement Benefits* (ASC 715). Liabilities and expense for pension plans and other postretirement benefits are determined using actuarial methodologies and incorporate significant assumptions, including the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions related to the employee workforce (compensation increases, health care cost trend rates, expected service period, retirement age, and mortality). These assumptions bear the risk of change as they require significant judgment and they have inherent uncertainties that management may not be able to control.

The actuarial models use an attribution approach that generally spreads the financial impact of changes to the plan and actuarial assumptions over the average remaining service lives of the employees in the plan or average life expectancy. The principle underlying the required attribution approach is that employees render service over their average remaining service lives on a relatively smooth basis and, therefore, the accounting for benefits earned under the pension or non-pension postretirement benefits plans should follow the same relatively smooth pattern. Changes in the liability due to changes in actuarial assumptions such as discount rate, rate of compensation increases and mortality, as well as annual deviations between what was assumed and what was experienced by the plan are treated as actuarial gains or losses. The actuarial gains and losses are initially recorded to "Other comprehensive income (loss)" and are subsequently amortized over periods of 15 years or less.

The most significant assumption used to calculate pension and other postretirement obligations is the discount rate used to determine the present value of benefits. The discount rate is based on spot rate yield curves and individual bond matching models for pension and other postretirement plans in Canada, the United States, United Kingdom, and other Euro zone countries, and on published long-term high quality corporate bond indices in other countries with adjustments made to the index rates based on the duration of the plans' obligations for each country, at the end of each fiscal year. This bond matching approach matches the bond yields with the year-to-year cash flow projections from the actuarial valuation to determine a discount rate that more accurately reflects the timing of the expected payments. The weighted average discount rate used to determine the pension benefit obligation was 3.0%, 3.1%, and 3.2%, and other postretirement benefit obligation was 4.0%, 4.0% and 4.1% as of March 31, 2019, 2018, and 2017, respectively. The weighted average discount rate used to determine the net periodic benefit cost is the rate used to determine the benefit obligation at the end of the previous fiscal year.

As of March 31, 2019, an increase in the discount rate of 0.5%, assuming inflation remains unchanged, would result in a decrease of \$151 million in the pension and other postretirement obligations and in a pre-tax decrease of \$15 million in the net periodic benefit cost in the following year. A decrease in the discount rate of 0.5% as of March 31, 2019, assuming inflation remains unchanged, would result in an increase of \$170 million in the pension and other postretirement obligations and in a pre-tax increase of \$16 million in the net periodic benefit cost in the following year.

The long term expected return on plan assets is based upon historical experience, expected future performance as well as current and projected investment portfolio diversification. The weighted average expected return on plan assets was 5.2% for 2019, 5.2% for 2018, and 5.4% for 2017. The expected return on assets is a long-term assumption whose accuracy can only be measured over a long period based on past experience. A variation in the expected return on assets of 0.5% as of March 31, 2019 would result in a pre-tax variation of approximately \$6 million in the net periodic benefit cost in the following year.

Income Taxes

We account for income taxes using the asset and liability method. Under the asset and liability method, deferred tax assets and liabilities are recognized for the estimated future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. In addition, deferred tax assets are also recorded with respect to net operating losses and other tax attribute carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates in effect for the year in which those temporary differences are expected to be recovered or settled. Valuation allowances are established when realization of the benefit of deferred tax assets is not deemed to be more likely than not. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date.

We considered all available evidence, both positive and negative, in determining the appropriate amount of the valuation allowance against our deferred tax assets as of March 31, 2019. In evaluating the need for a valuation allowance, we consider all potential sources of taxable income, including income available in carryback periods, future reversals of taxable temporary differences, projections of taxable income, and income from tax planning strategies, as well as any other available and relevant information. Positive evidence includes factors such as a history of profitable operations, projections of future profitability within the carryforward period and potential income from prudent and feasible tax planning strategies. Negative evidence includes items such as cumulative losses, projections of future losses, and carryforward periods that are not long enough to allow for the utilization of the deferred tax asset based on existing projections of income. In certain jurisdictions, deferred tax assets related to loss carryforwards and other temporary differences exist without a valuation allowance where in our judgment the weight of the positive evidence more than offsets the negative evidence.

Upon changes in facts and circumstances, we may conclude that certain deferred tax assets for which no valuation allowance is currently recorded may not be realizable in future periods, resulting in a charge to income. Existing valuation allowances are re-examined under the same standards of positive and negative evidence. If it is determined that it is more likely than not that a deferred tax asset will be realized, the appropriate amount of the valuation allowance, if any, is released, in the period this determination is made.

As of March 31, 2019, the Company concluded that valuation allowances totaling \$742 million were required against its deferred tax assets comprised of the following:

- \$542 million of the valuation allowance relates to loss carryforwards in Canada and certain foreign jurisdictions, \$72 million relates to New York tax credit carryforwards, and \$56 million relates to tax credit carryforwards in Canada.
- \$72 million of the valuation allowance relates to other deferred tax assets originating from temporary differences in Canada and certain foreign jurisdictions.

In determining these amounts, the Company considered the reversal of existing temporary differences as a source of taxable income. The ultimate realization of the remaining deferred tax assets is contingent on the Company's ability to generate future taxable income within the carryforward period and within the period in which the temporary differences become deductible. Due to the history of negative earnings in these jurisdictions and future projections of losses, the Company believes it is more likely than not the deferred tax assets will not be realized prior to expiration.

Through March 31, 2019, the Company recognized deferred tax assets related to loss carryforwards and other temporary items of approximately \$388 million. The Company determined that existing taxable temporary differences will reverse within the same period and jurisdiction, and are of the same character as the deductible temporary items generating sufficient taxable income to support realization of \$225 million of these deferred tax assets. Realization of the remaining \$163 million of deferred tax assets is dependent on our ability to earn pretax income aggregating approximately \$577 million in those jurisdictions to realize those deferred tax assets. The realization of our deferred tax assets is not dependent on tax planning strategies.

By their nature, tax laws are often subject to interpretation. Further complicating matters is that in those cases where a tax position is open to interpretation, differences of opinion can result in differing conclusions as to the amount of tax benefits to be recognized under ASC 740, *Income Taxes*. We utilize a two-step approach for evaluating tax positions. Recognition (Step 1) occurs when we conclude that a tax position, based solely on its technical merits, is more likely than not to be sustained upon examination. Measurement (Step 2) is only addressed if Step 1 has been satisfied. Under Step 2, we measure the tax benefit as the largest amount of benefit, determined on a cumulative probability basis that is more likely than not to be realized upon ultimate settlement. Consequently, the level of evidence and documentation necessary to support a position prior to being given recognition and measurement within the financial statements is a matter of judgment that depends on all available evidence.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"). The Act makes broad and complex changes to the U.S. tax code, including, but not limited to, (1) reducing the U.S. federal corporate tax rate from 35% to 21% effective January 1, 2018 and (2) bonus depreciation that allows for full expensing of qualified property. Simultaneous with the Act, the SEC Staff released Accounting Bulletin No. 118 ("SAB 118"), which allows the use of provisional amounts (reasonable estimates) if the analysis of the impacts of the Act have not been completed when financial statements are issued. During the third quarter of fiscal year 2019, we finalized the computations of the income tax effects of the Act. As such, in accordance with SAB 118, our accounting for the effects of the Act is complete. We did not significantly adjust provisional amounts recorded in the prior fiscal year and the SAB 118 measurement period subsequently ended on December 22, 2018. Although we no longer consider these amounts to be provisional, the determination of the Act's income tax effects may change following future legislation or further interpretation of the Act based on the publication of recently proposed U.S. Treasury regulations and guidance from the Internal Revenue Service and state tax authorities.

Assessment of Loss Contingencies

We have legal and other contingencies, including environmental liabilities, which could result in significant losses upon the ultimate resolution of such contingencies. Environmental liabilities that are not legal asset retirement obligations are accrued on an undiscounted basis when it is probable that a liability exists for past events.

We have provided for losses in situations where we have concluded that it is probable that a loss has been or will be incurred and the amount of the loss is reasonably estimable. A significant amount of judgment is involved in determining whether a loss is probable and reasonably estimable due to the uncertainty involved in determining the likelihood of future events and estimating the financial statement impact of such events. If further developments or resolution of a contingent matter are not consistent with our assumptions and judgments, we may need to recognize a significant charge in a future period related to an existing contingency.

RECENTLY ISSUED ACCOUNTING STANDARDS

See Note 1 — Business and Summary of Significant Accounting Policies to our accompanying consolidated financial statements for a full description of recent accounting pronouncements including the respective expected dates of adoption and expected effects on results of operations and financial condition.

NON-GAAP FINANCIAL MEASURES

Segment Income

Total “Segment income” presents the sum of the results of our four operating segments on a consolidated basis. We believe that total “Segment income” is an operating performance measure that measures operating results unaffected by differences in capital structures, capital investment cycles and ages of related assets among otherwise comparable companies. In reviewing our corporate operating results, we also believe it is important to review the aggregate consolidated performance of all of our segments on the same basis we review the performance of each of our regions and to draw comparisons between periods based on the same measure of consolidated performance.

Management believes investors’ understanding of our performance is enhanced by including this non-GAAP financial measure as a reasonable basis for comparing our ongoing results of operations. Many investors are interested in understanding the performance of our business by comparing our results from ongoing operations from one period to the next and would ordinarily add back items that are not part of normal day-to-day operations of our business. By providing total “Segment income,” together with reconciliations, we believe we are enhancing investors’ understanding of our business and our results of operations, as well as assisting investors in evaluating how well we are executing strategic initiatives.

However, total “Segment income” is not a measurement of financial performance under U.S. GAAP, and our total “Segment income” may not be comparable to similarly titled measures of other companies. Total “Segment income” has important limitations as an analytical tool and should not be considered in isolation or as a substitute for analysis of our results as reported under U.S. GAAP. For example, total “Segment income”:

- does not reflect the company’s cash expenditures or requirements for capital expenditures or capital commitments;
- does not reflect changes in, or cash requirements for, the company’s working capital needs; and
- does not reflect any costs related to the current or future replacement of assets being depreciated and amortized.

We also use total “Segment income”:

- as a measure of operating performance to assist us in comparing our operating performance on a consistent basis because it removes the impact of items not directly resulting from our core operations;
- for planning purposes, including the preparation of our internal annual operating budgets and financial projections;
- to evaluate the performance and effectiveness of our operational strategies; and
- as a basis to calculate incentive compensation payments for our key employees.

Total “Segment income” is equivalent to our Adjusted EBITDA, which we refer to in our earnings announcements and other external presentations to analysts and investors. Please see Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information for our definition of “Segment income”.

Free Cash Flow

“Free cash flow” consists of: (a) “net cash provided by (used in) operating activities,” (b) plus “net cash provided by (used in) investing activities,” (c) plus cash used in the “Acquisition of assets under a capital lease”, and (d) less “proceeds from sales of assets, net of transaction fees, cash income taxes and hedging.” Management believes “Free cash flow” is relevant to investors as it provides a measure of the cash generated internally that is available for debt service and other value creation opportunities. However, “Free cash flow” does not necessarily represent cash available for discretionary activities, as certain debt service obligations must be funded out of “Free cash flow”. Our method of calculating “Free cash flow” may not be consistent with that of other companies.

Effective in the second quarter of fiscal 2019, management clarified the definition of “Free cash flow” (a non-GAAP measure) to exclude the impact of cash outflows related to the “Acquisition of assets under a capital lease”. This change further enables users of the financial statements to understand cash generated internally by the Company. This change does not impact the consolidated financial statements or prior periods reported.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to certain market risks as part of our ongoing business operations, including risks from changes in metal prices (primarily aluminum, copper and local market premiums), energy prices (electricity, natural gas and diesel fuel), foreign currency exchange rates and interest rates that could impact our results of operations and financial condition. We manage our exposure to these and other market risks through regular operating and financing activities and derivative financial instruments. We use derivative financial instruments as risk management tools only, and not for speculative purposes.

By their nature, all derivative financial instruments involve risk, including the credit risk of non-performance by counterparties. All derivative contracts are executed with counterparties that, in our judgment, are creditworthy. Our maximum potential loss may exceed the amount recognized in the accompanying March 31, 2019 consolidated balance sheet.

The decision of whether and when to execute derivative instruments, along with the duration of the instrument, can vary from period to period depending on market conditions and the relative costs of the instruments. The duration is linked to the timing of the underlying exposure, with the connection between the two being regularly monitored.

The market risks we are exposed to as part of our ongoing business operations are materially consistent with our risk exposures in the prior year, as we have not entered into any new material hedging programs.

Commodity Price Risks

We have commodity price risk with respect to purchases of certain raw materials including aluminum, copper, electricity, natural gas and transport fuel.

Metal

A significant amount of our business is conducted under a conversion model, which allows us to pass through increases or decreases in the price of aluminum to our customers. Nearly all of our flat rolled products have a price structure with three components: (i) a base aluminum price quoted off the London Metal Exchange (LME); (ii) a local market premium; and (iii) a “conversion premium” to produce the rolled product which reflects, among other factors, the competitive market conditions for that product. Base aluminum prices are typically driven by macroeconomic factors and global supply and demand for aluminum. The local market premiums tend to vary based on the supply and demand for metal in a particular region and associated transportation costs.

Increases or decreases in the average price of aluminum based on the LME directly impact “Net sales,” “Cost of goods sold (exclusive of depreciation and amortization)” and working capital. The timing of these impacts varies based on contractual arrangements with customers and metal suppliers in each region. These timing impacts are referred to as metal price lag. Metal price lag exists due to: (i) certain customer contracts containing fixed forward price commitments which result in exposure to changes in metal prices for the period of time between when our sales price fixes and the sale actually occurs, and (ii) the period of time between the pricing of our purchases of metal, holding and processing the metal, and the pricing of the sale of finished inventory to our customers.

We use derivative instruments to preserve our conversion margins and manage the timing differences associated with metal price lag related to base aluminum price. We use over-the-counter derivatives indexed to the LME (referred to as our “aluminum derivative contracts”) to reduce our exposure to fluctuating metal prices associated with the period of time between the pricing of our purchases of inventory and the pricing of the sale of that inventory to our customers. We also purchase forward LME aluminum contracts simultaneous with our sales contracts with customers that contain fixed metal prices. These LME aluminum forward contracts directly hedge the economic risk of future metal price fluctuations to better match the purchase price of metal with the sales price of metal.

In addition to aluminum, in the first quarter of fiscal year 2019, we entered into LME copper and LMP forward contracts.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2019, given a 10% change in prices (\$ in millions).

	Change in Price	Change in Fair Value
Aluminum	10 %	\$ (65)
Copper	(10)%	\$ (1)

Energy

We use several sources of energy in the manufacturing and delivery of our aluminum rolled products. For the year ended March 31, 2019, natural gas and electricity represented approximately 97% of our energy consumption by cost. We also use fuel oil and transport fuel. The majority of energy usage occurs at our casting centers and during the hot rolling of aluminum.

We purchase our natural gas and diesel fuel on the open market, subjecting us to market price fluctuations. We seek to stabilize our future exposure to natural gas and diesel fuel prices through the use of forward purchase contracts.

A portion of our electricity requirements are purchased pursuant to long-term contracts in the local regions in which we operate. A number of our facilities are located in regions with regulated prices, which affords relatively stable costs. In North America, we have entered into an electricity swap to fix a portion of the cost of our electricity requirements.

Fluctuating energy costs worldwide, due to the changes in supply and demand, and international and geopolitical events, expose us to earnings volatility as changes in such costs cannot be immediately recovered under existing contracts and sales agreements, and may only be mitigated in future periods under future pricing arrangements.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2019, given a 10% decline in spot prices for energy contracts (\$ in millions).

	Change in Price	Change in Fair Value
Electricity	(10)%	\$ (3)
Natural Gas	(10)%	\$ (4)
Diesel Fuel	(10)%	\$ (2)

Foreign Currency Exchange Risks

Exchange rate movements have an impact on our operating results. In Europe, where we have predominantly local currency selling prices and operating costs, we benefit as the Euro strengthens, but are adversely affected as the Euro weakens. For our Swiss operations, where operating costs are incurred primarily in the Swiss franc and a large portion of revenues are denominated in the Euro, we benefit as the Franc weakens but are adversely affected as the Franc strengthens. In South Korea, where we have local currency operating costs and U.S. dollar denominated selling prices for exports, we benefit as the won weakens but are adversely affected as the won strengthens. In Brazil, where we have predominately U.S. dollar selling prices and local currency manufacturing costs, we benefit as the real weakens, but are adversely affected as the real strengthens. We use foreign exchange forward contracts and cross-currency swaps to manage our exposure arising from recorded assets and liabilities, firm commitments, and forecasted cash flows denominated in currencies other than the functional currency of certain operations, which include capital expenditures and net investment in foreign subsidiaries.

It is our policy to minimize exposures from non-functional currency denominated transactions within each of our operating segments. We use foreign exchange forward contracts, options and cross-currency swaps to manage exposure arising from recorded assets and liabilities, firm commitments, and forecasted cash flows denominated in currencies other than the functional currency of certain operations, which include forecasted net sales, forecasted purchase commitments, capital expenditures and net investment in foreign subsidiaries. Our most significant non-U.S. dollar functional currency operations have the Euro and the Korean won as their functional currencies, respectively. Our Brazilian operations are U.S. dollar functional.

We also face translation risks related to the changes in foreign currency exchange rates which are generally not hedged. Amounts invested in these foreign operations are translated into U.S. dollars at the exchange rates in effect at the balance sheet date. Any resulting translation adjustments are recorded as a component of "Accumulated other comprehensive income/loss" in the Shareholder's equity/deficit section of our consolidated balance sheets. Net sales and expenses at these non-U.S. dollar functional currency entities are translated into varying amounts of U.S. dollars depending upon whether the U.S. dollar weakens or strengthens against other currencies. Therefore, changes in exchange rates may either positively or negatively affect our net sales and expenses as expressed in U.S. dollars.

Any negative impact of currency movements on the currency contracts we have entered into to hedge foreign currency commitments to purchase or sell goods and services would be offset by an approximately equal and opposite favorable exchange impact on the commitments being hedged. For a discussion of accounting policies and other information relating to currency contracts, see Note 1 — Business and Summary of Significant Accounting Policies and Note 15 — Financial Instruments and Commodity Contracts to our accompanying consolidated financial statements.

Sensitivities

The following table presents the estimated potential effect on the fair values of these derivative instruments as of March 31, 2019, given a 10% change in rates (\$ in millions).

	Change in Exchange Rate	Change in Fair Value
Currency measured against the U.S. dollar		
Brazilian real	(10)%	\$ (29)
Euro	10 %	\$ (18)
Korean won	(10)%	\$ (40)
Canadian dollar	(10)%	\$ (4)
British pound	(10)%	\$ (17)
Swiss franc	(10)%	\$ (24)
Chinese yuan	10 %	\$ (3)

Interest Rate Risks

We use interest rate swaps to manage our exposure to changes in benchmark interest rates which impact our variable-rate debt.

The interest rate paid on our Term Loan Facility is a spread of 1.85% plus LIBOR (2.60%). As of March 31, 2019, the effective interest rate was 4.45%. As of March 31, 2019, a 100 basis point increase or decrease in LIBOR interest rates would have had a \$18 million impact on our annual pre-tax income.

From time to time, we have used interest rate swaps to manage our debt cost. As of March 31, 2019, there were no USD LIBOR based interest rate swaps outstanding.

In South Korea, we periodically enter into interest rate swaps to fix the interest rate on various floating rate debt in order to manage our exposure to changes in the 3M-CD interest rate. As of March 31, 2019, there were no 3M-CD based interest rate swaps outstanding.

Item 8. Financial Statements and Supplementary Data

TABLE OF CONTENTS

Management’s Report on Internal Control over Financial Reporting	53
Report of Independent Registered Public Accounting Firm	54
Consolidated Statements of Operations	56
Consolidated Statements of Comprehensive Income (Loss)	57
Consolidated Balance Sheets	58
Consolidated Statements of Cash Flows	59
Consolidated Statements of Shareholder’s (Deficit) Equity	60
Notes to the Consolidated Financial Statements	61

Management's Report on Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) under the Exchange Act, as amended. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of the Company's financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our internal control over financial reporting includes those policies and procedures that:

- Pertain to the maintenance of records that in reasonable detail accurately and fairly reflect the transactions and dispositions of the assets of the Company;
- Provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and
- Provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of the Company's assets that could have a material effect on the Company's consolidated financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management has assessed the effectiveness of the Company's internal control over financial reporting as of March 31, 2019. In making this assessment, management used the criteria established by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "*Internal Control — Integrated Framework (2013)*." Based on its assessment, management has concluded that, as of March 31, 2019, the Company's internal control over financial reporting was effective based on those criteria.

The effectiveness of the Company's internal control over financial reporting as of March 31, 2019 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which appears herein.

/s/ Steven Fisher

Steven Fisher
President and Chief Executive Officer
May 8, 2019

/s/ Devinder Ahuja

Devinder Ahuja
Senior Vice President and Chief Financial Officer
May 8, 2019

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholder of Novelis Inc.

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Novelis Inc. and its subsidiaries ("the Company") as of March 31, 2019 and 2018, and the related consolidated statements of operations, comprehensive income (loss), shareholder's (deficit) equity, and cash flows, for each of the three years in the period ended March 31, 2019, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of March 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of March 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended March 31, 2019 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of March 31, 2019, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/PricewaterhouseCoopers LLP

Atlanta, Georgia
May 8, 2019

We have served as the Company's auditor since 2006.

Novelis Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in millions)

	Year Ended March 31,		
	2019	2018	2017
Net sales	\$ 12,326	\$ 11,462	\$ 9,591
Cost of goods sold (exclusive of depreciation and amortization)	10,422	9,700	7,992
Selling, general and administrative expenses	502	466	396
Depreciation and amortization	350	354	360
Interest expense and amortization of debt issuance costs	268	255	294
Research and development expenses	72	64	58
Gain on assets held for sale	—	—	(2)
(Gain) loss on sale of a business, net	—	(318)	27
Loss on extinguishment of debt	—	—	134
Restructuring and impairment, net	2	34	10
Equity in net (income) loss of non-consolidated affiliates	(3)	1	8
Business acquisition and other integration related costs	33	—	—
Other expenses, net	44	51	117
	\$ 11,690	\$ 10,607	\$ 9,394
Income before income taxes	636	855	197
Income tax provision	202	233	151
Net income	\$ 434	\$ 622	\$ 46
Net (loss) income attributable to noncontrolling interests	—	(13)	1
Net income attributable to our common shareholder	\$ 434	\$ 635	\$ 45

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in millions)

	Year Ended March 31,		
	2019	2018	2017
Net income	\$ 434	\$ 622	\$ 46
Other comprehensive (loss) income:			
Currency translation adjustment	(171)	191	(59)
Net change in fair value of effective portion of hedges, net	(70)	109	(57)
Net change in pension and other benefits, net	(8)	12	74
Other comprehensive (loss) income before income tax effect	\$ (249)	\$ 312	\$ (42)
Income tax (benefit) provision related to items of other comprehensive income	(22)	34	—
	(227)	278	(42)
Comprehensive income	\$ 207	\$ 900	\$ 4
Less: Comprehensive income (loss) attributable to noncontrolling interest, net of tax	2	(19)	4
Comprehensive income attributable to our common shareholder	\$ 205	\$ 919	\$ —

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED BALANCE SHEETS
(in millions, except number of shares)

	March 31,	
	2019	2018
ASSETS		
Current assets		
Cash and cash equivalents	\$ 950	\$ 920
Accounts receivable, net		
— third parties (net of uncollectible accounts of \$7 as of March 31, 2019 and March 31, 2018)	1,417	1,353
— related parties	164	242
Inventories	1,460	1,560
Prepaid expenses and other current assets	121	125
Fair value of derivative instruments	70	159
Assets held for sale	3	5
Total current assets	\$ 4,185	\$ 4,364
Property, plant and equipment, net	3,385	3,110
Goodwill	607	607
Intangible assets, net	351	410
Investment in and advances to non-consolidated affiliate	792	849
Deferred income tax assets	142	75
Other long-term assets		
— third parties	101	97
— related parties	—	3
Total assets	\$ 9,563	\$ 9,515
LIABILITIES AND SHAREHOLDER'S EQUITY		
Current liabilities		
Current portion of long-term debt	\$ 19	\$ 121
Short-term borrowings	39	49
Accounts payable		
— third parties	1,986	2,051
— related parties	175	205
Fair value of derivative instruments	87	106
Accrued expenses and other current liabilities	616	591
Total current liabilities	\$ 2,922	\$ 3,123
Long-term debt, net of current portion	4,328	4,336
Deferred income tax liabilities	223	164
Accrued postretirement benefits	844	825
Other long-term liabilities	180	244
Total liabilities	\$ 8,497	\$ 8,692
Commitments and contingencies		
Shareholder's equity		
Common stock, no par value; unlimited number of shares authorized; 1,000 shares issued and outstanding as of March 31, 2019 and March 31, 2018	—	—
Additional paid-in capital	1,404	1,404
Accumulated equity (deficit)	203	(283)
Accumulated other comprehensive loss	(506)	(261)
Total equity of our common shareholder	\$ 1,101	\$ 860
Noncontrolling interests	(35)	(37)
Total equity	\$ 1,066	\$ 823
Total liabilities and equity	\$ 9,563	\$ 9,515

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year Ended March 31,		
	2019	2018	2017
OPERATING ACTIVITIES			
Net income	\$ 434	\$ 622	\$ 46
Adjustments to determine net cash provided by operating activities:			
Depreciation and amortization	350	354	360
Loss (gain) on unrealized derivatives and other realized derivatives in investing activities, net	(6)	15	(15)
Gain on assets held for sale	—	—	(2)
(Gain) loss on sale of business	—	(318)	27
Loss on sale of assets	6	7	6
Impairment charges	—	15	2
Loss on extinguishment of debt	—	—	134
Deferred income taxes	50	41	6
Amortization of fair value adjustments, net	—	—	7
Equity in net (income) loss of non-consolidated affiliates	(3)	1	8
(Gain) loss on foreign exchange remeasurement of debt	—	(2)	2
Amortization of debt issuance costs and carrying value adjustments	17	19	22
Other, net	(1)	1	3
Changes in assets and liabilities including assets and liabilities held for sale (net of effects from divestitures):			
Accounts receivable	(71)	(415)	(166)
Inventories	32	(151)	(193)
Accounts payable	(74)	336	253
Other current assets	(3)	21	(17)
Other current liabilities	34	(5)	34
Other noncurrent assets	(7)	(5)	(30)
Other noncurrent liabilities	(30)	37	76
Net cash provided by operating activities	\$ 728	\$ 573	\$ 563
INVESTING ACTIVITIES			
Capital expenditures	(351)	(226)	(224)
Acquisition of assets under a capital lease	(239)	—	—
Proceeds from sales of assets, third party, net of transaction fees and hedging	2	2	4
Proceeds (outflows) from the sale of a business	—	314	(2)
Proceeds from investment in and advances to non-consolidated affiliates, net	12	16	2
Proceeds (outflows) from settlement of derivative instruments, net	7	(23)	8
Other	12	13	12
Net cash (used in) provided by investing activities	\$ (557)	\$ 96	\$ (200)
FINANCING ACTIVITIES			
Proceeds from issuance of long-term and short-term borrowings	—	—	4,572
Principal payments of long-term and short-term borrowings	(112)	(174)	(4,477)
Revolving credit facilities and other, net	(2)	(211)	(229)
Debt issuance costs	(4)	(5)	(191)
Net cash used in financing activities	\$ (118)	\$ (390)	\$ (325)
Net increase in cash and cash equivalents and restricted cash	53	279	38
Effect of exchange rate changes on cash	(25)	47	—
Cash, cash equivalents and restricted cash — beginning of period	932	606	568
Cash, cash equivalents and restricted cash — end of period	<u>\$ 960</u>	<u>\$ 932</u>	<u>\$ 606</u>

See accompanying notes to the consolidated financial statements.

Novelis Inc.
CONSOLIDATED STATEMENTS OF SHAREHOLDER'S (DEFICIT) EQUITY
(in millions, except number of shares)

(Deficit) Equity of our Common Shareholder								
Common Stock								
	Shares	Amount	Additional Paid-in Capital	Retained Earnings/ (Accumulated Deficit)	Accumulated Other Comprehensive Loss (AOCI)	Non- Controlling Interests	Total (Deficit)/ Equity	
Balance as of March 31, 2016	1,000	\$ —	\$ 1,404	\$ (963)	\$ (500)	\$ —	\$ (59)	
Net income attributable to our common shareholder	—	—	—	45	—	—	45	
Net income attributable to noncontrolling interests	—	—	—	—	—	1	1	
Currency translation adjustment, included in AOCI	—	—	—	—	(60)	1	(59)	
Change in fair value of effective portion of hedges, net of tax provision of \$22 included in AOCI	—	—	—	—	(35)	—	(35)	
Change in pension and other benefits, net of tax benefit of \$22 included in AOCI	—	—	—	—	50	2	52	
Noncontrolling interests related to the sale of a business	—	—	—	—	—	(22)	(22)	
Balance as of March 31, 2017	1,000	\$ —	\$ 1,404	\$ (918)	\$ (545)	\$ (18)	\$ (77)	
Net income attributable to our common shareholder	—	—	—	635	—	—	635	
Net loss attributable to noncontrolling interests	—	—	—	—	—	(13)	(13)	
Currency translation adjustment, included in AOCI	—	—	—	—	191	—	191	
Change in fair value of effective portion of cash flow hedges, net of tax provision of \$32 million included in AOCI	—	—	—	—	77	—	77	
Change in pension and other benefits, net of tax provision of \$2 million included in AOCI	—	—	—	—	16	(6)	10	
Balance as of March 31, 2018	1,000	\$ —	\$ 1,404	\$ (283)	\$ (261)	\$ (37)	\$ 823	
Adoption of accounting standards updates (See Note 1)	—	—	—	52	(16)	—	36	
Balance as of April 1, 2018	1,000	\$ —	\$ 1,404	\$ (231)	\$ (277)	\$ (37)	\$ 859	
Net income attributable to our common shareholder	—	—	—	434	—	—	434	
Currency translation adjustment, included in AOCI	—	—	—	—	(171)	—	(171)	
Change in fair value of effective portion of cash flow hedges, net of tax benefit of \$20 million included in AOCI	—	—	—	—	(50)	—	(50)	
Change in pension and other benefits, net of tax benefit of \$2 million included in AOCI	—	—	—	—	(8)	2	(6)	
Balance as of March 31, 2019	1,000	\$ —	\$ 1,404	\$ 203	\$ (506)	\$ (35)	\$ 1,066	

See accompanying notes to the consolidated financial statements.

1. BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

References herein to “Novelis,” the “Company,” “we,” “our,” or “us” refer to Novelis Inc. and its subsidiaries unless the context specifically indicates otherwise. References herein to “Hindalco” refer to Hindalco Industries Limited. Hindalco acquired Novelis in May 2007. All of the common shares of Novelis are owned directly by AV Metals Inc. and indirectly by Hindalco Industries Limited.

Organization and Description of Business

We produce aluminum sheet and light gauge products for use in the packaging market, which includes beverage and food can and foil products, as well as for use in the automotive, transportation, electronics, architectural and industrial product markets. We have recycling operations in many of our plants to recycle post-consumer aluminum, such as used-beverage cans and post-industrial aluminum, such as class scrap. As of March 31, 2019, we had manufacturing operations in ten countries on four continents: North America, South America, Asia and Europe, through 23 operating facilities, including recycling operations in twelve of these plants.

Consolidation Policy

Our consolidated financial statements include the assets, liabilities, revenues and expenses of all wholly-owned subsidiaries, majority-owned subsidiaries over which we exercise control and entities in which we have a controlling financial interest or are deemed to be the primary beneficiary. We eliminate all significant intercompany accounts and transactions from our consolidated financial statements.

We use the equity method to account for our investments in entities that we do not control, but where we have the ability to exercise significant influence over operating and financial policies. Consolidated “Net income attributable to our common shareholder” includes our share of net income (loss) of these entities. The difference between consolidation and the equity method impacts certain of our financial ratios because of the presentation of the detailed line items reported in the consolidated financial statements for consolidated entities, compared to a two-line presentation of “Investment in and advances to non-consolidated affiliates” and “Equity in net (income) loss of non-consolidated affiliates.”

Use of Estimates and Assumptions

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America (U.S. GAAP) requires us to make estimates and assumptions. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosures of contingent assets and liabilities as of the date of the financial statements, and the reported amounts of revenues and expenses during the reporting periods. The principal areas of judgment relate to (1) the fair value of derivative financial instruments; (2) impairment of goodwill; (3) impairment of long lived assets and other intangible assets; (4) impairment and assessment of consolidation of equity investments; (5) actuarial assumptions related to pension and other postretirement benefit plans; (6) tax uncertainties and valuation allowances; and (7) assessment of loss contingencies, including environmental and litigation liabilities. Future events and their effects cannot be predicted with certainty, and accordingly, our accounting estimates require the exercise of judgment. The accounting estimates used in the preparation of our consolidated financial statements may change as new events occur, as more experience is acquired, as additional information is obtained and as our operating environment changes. We evaluate and update our assumptions and estimates on an ongoing basis and may employ outside experts to assist in our evaluations. Actual results could differ from the estimates we have used.

Revision of Previously Issued Financial Statements

As of March 31, 2018, we decreased the “Accumulated benefit obligation” of pension plans with accumulated benefit obligations in excess of plan assets within Note 13 — Postretirement Benefit Plans by \$31 million. This misstatement only impacted the footnote disclosure and did not impact previously reported consolidated financial statements.

As of March 31, 2018, we increased “Costs and expenses related to net sales” for our non-consolidated equity method affiliates in Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions by \$18 million, resulting in revised “Net income (loss)” of \$9 million for our equity method affiliates. This misstatement only impacted the footnote disclosure and did not impact previously reported consolidated financial statements.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

As of March 31, 2018, we increased "Deferred income tax assets" and "Other long-term liabilities" in the amount of \$12 million. This misclassification also impacted previously reported fiscal 2018 financial statement line items contained within "Net cash provided by operating activities". Although no cash flow statement subtotal was impacted, current and deferred income tax expense and balances, as disclosed in Note 19 — Income Taxes and relevant amounts disclosed in Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information were impacted.

We assessed the materiality of the misstatements and concluded that these misstatements were not material to the Company's previously issued financial statements and that amendments of previously filed reports were therefore not required. However, we elected to revise the previously reported amounts in the respective consolidated balance sheets, the consolidated statement of cash flows, and we have also revised the footnotes for the disclosure misstatements described above, as applicable.

Reclassification

Certain prior period amounts have been adjusted as a result of the adoption of new accounting standards, as discussed below.

Risks and Uncertainties

We are exposed to a number of risks in the normal course of our operations that could potentially affect our financial position, results of operations, and cash flows.

Laws and regulations

We operate in an industry that is subject to a broad range of environmental, health and safety laws and regulations in the jurisdictions in which we operate. These laws and regulations impose increasingly stringent environmental, health and safety protection standards and permitting requirements regarding, among other things, air emissions, wastewater storage, treatment and discharges, the use and handling of hazardous or toxic materials, waste disposal practices, the remediation of environmental contamination, post-mining reclamation and working conditions for our employees. Some environmental laws, such as the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, and comparable state laws, impose joint and several liability for the cost of environmental remediation, natural resource damages, third party claims, and other expenses, without regard to the fault or the legality of the original conduct.

The costs of complying with these laws and regulations, including participation in assessments and remediation of contaminated sites and installation of pollution control facilities, have been, and in the future could be, significant. In addition, these laws and regulations may also result in substantial environmental liabilities associated with divested assets, third party locations and past activities. In certain instances, these costs and liabilities, as well as related action to be taken by us, could be accelerated or increased if we were to close, divest of or change the principal use of certain facilities with respect to which we may have environmental liabilities or remediation obligations. Currently, we are involved in a number of compliance efforts, remediation activities and legal proceedings concerning environmental matters, including certain activities and proceedings arising under U.S. Superfund and comparable laws in other jurisdictions where we have operations.

We have established liabilities for environmental remediation where appropriate. However, the cost of addressing environmental matters (including the timing of any charges related thereto) cannot be predicted with certainty, and these liabilities may not ultimately be adequate, especially in light of potential changes in environmental conditions, changing interpretations of laws and regulations by regulators and courts, the discovery of previously unknown environmental conditions, the risk of governmental orders to carry out additional compliance on certain sites not initially included in remediation in progress, our potential liability to remediate sites for which provisions have not been previously established and the adoption of more stringent environmental laws. Such future developments could result in increased environmental costs and liabilities and could require significant capital expenditures, any of which could have a material adverse effect on our financial position or results of operations or cash flows. Furthermore, the failure to comply with our obligations under the environmental laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions or other orders, including orders to cease operations. In addition, the presence of environmental contamination at our properties could adversely affect our ability to sell a property, receive full value for a property or use a property as collateral for a loan.

Some of our current and potential operations are located or could be located in or near communities that may regard such operations as having a detrimental effect on their social and economic circumstances. Environmental laws typically provide for participation in permitting decisions, site remediation decisions and other matters. Concern about environmental justice issues may affect our operations. Should such community objections be presented to government officials, the consequences of such a development may have a material adverse impact upon the profitability or, in extreme cases, the viability of an operation. In addition, such developments may adversely affect our ability to expand or enter into new operations in such location or elsewhere and may also have an effect on the cost of our environmental remediation projects.

We use a variety of hazardous materials and chemicals in our rolling processes and in connection with maintenance work on our manufacturing facilities. Because of the nature of these substances or related residues, we may be liable for certain costs, including, among others, costs for health-related claims or removal or re-treatment of such substances. Certain of our current and former facilities incorporated asbestos-containing materials, a hazardous substance that has been the subject of health-related claims for occupation exposure. In addition, although we have developed environmental, health and safety programs for our employees, including measures to reduce employee exposure to hazardous substances, and conduct regular assessments at our facilities, we are currently, and in the future may be, involved in claims and litigation filed on behalf of persons alleging injury predominantly as a result of occupational exposure to substances at our current or former facilities. It is not possible to predict the ultimate outcome of these claims and lawsuits due to the unpredictable nature of personal injury litigation. If these claims and lawsuits, individually or in the aggregate, were finally resolved against us, our financial position, results of operations and cash flows could be adversely affected.

Materials and labor

In the aluminum rolled products industry, our raw materials are subject to continuous price volatility. We may not be able to pass on the entire cost of the increases to our customers or offset fully the effects of higher raw material costs through productivity improvements, which may cause our profitability to decline. In addition, there is a potential time lag between changes in prices under our purchase contracts and the point when we can implement a corresponding change under our sales contracts with our customers. As a result, we could be exposed to fluctuations in raw materials prices which could have a material adverse effect on our financial position, results of operations and cash flows. Significant price increases may result in our customers substituting other materials, such as plastic or glass, for aluminum or switching to another aluminum rolled products producer, which could have a material adverse effect on our financial position, results of operations and cash flows.

We consume substantial amounts of energy in our rolling operations and our cast house operations. The factors that affect our energy costs and supply reliability tend to be specific to each of our facilities. A number of factors could materially adversely affect our energy position including, but not limited to: (a) increases in the cost of natural gas; (b) increases in the cost of supplied electricity or fuel oil related to transportation; (c) interruptions in energy supply due to equipment failure or other causes and (d) the inability to extend energy supply contracts upon expiration on economical terms. A significant increase in energy costs or disruption of energy supplies or supply arrangements could have a material adverse effect on our financial position, results of operations and cash flows.

A substantial portion of our employees are represented by labor unions under a large number of collective bargaining agreements with varying durations and expiration dates. Although we have not experienced a strike or work stoppage in recent years, we may not be successful in preventing such an event from occurring in the future at one or more of our manufacturing facilities. In addition, we may not be able to satisfactorily renegotiate our collective bargaining agreements when they expire. Any work stoppages or material changes in the terms of our labor agreements could have an adverse impact on our financial condition.

Geographic markets

We are, and will continue to be, subject to financial, political, economic and business risks in connection with our global operations. We have made investments and carry on production activities in various emerging markets, including China, Brazil and South Korea, and we market our products in these countries, as well as certain other countries in Asia, Africa, and the Middle East. While we anticipate higher growth or attractive production opportunities from these emerging markets, they also present a higher degree of risk than more developed markets. In addition to the business risks inherent in developing and servicing new markets, economic conditions may be more volatile, legal and regulatory systems may be less developed and predictable, and the possibility of various types of adverse governmental action may be more pronounced. In addition, inflation, fluctuations in currency and interest rates, competitive factors, civil unrest and labor problems could affect our revenues, expenses and results of operations. Our operations could also be adversely affected by acts of war, terrorism or the threat of any of these events as well as government actions such as controls on imports, exports and prices, tariffs, new forms of taxation, changes in fiscal regimes and increased government regulation in the countries in which we operate or service customers. Unexpected or uncontrollable events or circumstances in any of these markets could have a material adverse effect on our financial position, results of operations and cash flows.

Other risks and uncertainties

In addition, refer to Note 15 — Financial Instruments and Commodity Contracts, Note 17 — Fair Value Measurements and Note 20 — Commitments and Contingencies for a discussion of financial instruments and commitments and contingencies.

Revenue Recognition

Effective for the first quarter of fiscal 2019, we adopted ASU 2014-09, *Revenue from Contracts with Customers* (Topic 606) and all the related amendments which supersedes the standard in former ASC 605, *Revenue Recognition*. The new standard requires entities to recognize revenue based on the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for these goods or services. We adopted Topic 606 using the modified retrospective transition approach. We determined that our existing revenue recognition practices were in compliance with Topic 606. Accordingly, there was no cumulative effect adjustment to the opening balance of retained earnings in the consolidated balance sheet in the first quarter of fiscal 2019, as the adoption did not result in a change to our timing of revenue recognition. See Note 2 — Revenue from Contracts with Customers for additional disclosures related to the adoption of this standard. The adoption of this standard did not have a material impact on the consolidated financial statements.

Cost of Goods Sold (Exclusive of Depreciation and Amortization)

“Cost of goods sold (exclusive of depreciation and amortization)” includes all costs associated with inventories, including the procurement of materials, the conversion of such materials into finished products, and the costs of warehousing and distributing finished goods to customers. Material procurement costs include inbound freight charges as well as purchasing, receiving, inspection and storage costs. Conversion costs include the costs of direct production inputs such as labor and energy, as well as allocated overheads from indirect production centers and plant administrative support areas. Warehousing and distribution costs include inside and outside storage costs, outbound freight charges and the costs of internal transfers.

Selling, General and Administrative Expenses

“Selling, general and administrative expenses” include selling, marketing and advertising expenses; salaries, travel and office expenses of administrative employees and contractors; legal and professional fees; software license fees; bad debt expenses; and factoring expenses.

Research and Development

We incur costs in connection with research and development programs that are expected to contribute to future earnings, and charge such costs against income as incurred. Research and development costs consist primarily of salaries and administrative costs.

Restructuring Activities

Restructuring charges, which are recorded within "Restructuring and impairment, net," include employee severance and benefit costs, impairments of assets, and other costs associated with exit activities. Restructuring costs are determined based on estimates prepared at the time the restructuring actions were approved by management and are periodically updated for changes. Restructuring costs include expenses that are recorded through the restructuring liability. We apply the provisions of ASC 420, *Exit or Disposal Cost Obligations* and ASC 712, *Compensation — Nonretirement Postemployment Benefits*. Severance costs accounted for under ASC 420 and/or ASC 712 are recognized when management with the proper level of authority has committed to a restructuring plan and communicated those actions to employees. Impairment losses are based upon the estimated fair value less costs to sell, with fair value estimated based on existing market prices for similar assets. Other exit costs include environmental remediation costs and contract termination costs, primarily related to equipment and facility lease obligations. At each reporting date, we evaluate the accruals for restructuring costs to ensure the accruals are still appropriate. See Note 3 — Restructuring and Impairment for further discussion.

Business Acquisition and Other Integration Related Costs

"Business acquisition and other integration related costs" include expenses associated with the acquisition (the "Acquisition") of Aleris Corporation (Aleris). The expenses consist of the costs incurred related to the transaction and to integrate Aleris subsequent to the acquisition. The acquisition remains subject to customary closing conditions and regulatory approvals. See Note 11 — Debt for further details about the transaction.

Carbon Emission Allowances

Emission allowances are recognized when there is reasonable assurance that we will comply with the respective conditions required and that the allowances, or grants, will be received. The allowances are recognized as income over the respective periods in which the intended expenses are offset. We recognize emission allowances as non-amortizing intangible assets since the allowance benefit is an offset against a future expense demonstrating compliance with the respective regulation, and never received in the form of cash. Although the intangible is not amortized, it is subject to impairment under the indefinite lived intangible asset impairment model. The intangible asset is recognized at nominal value once we have satisfied all requirements, are granted the allowance(s) and are able to exercise control. Any excess credits are accrued.

Cash and Cash Equivalents

"Cash and cash equivalents" includes investments that are highly liquid and have maturities of three months or less when purchased. The carrying values of cash and cash equivalents approximate their fair value due to the short-term nature of these instruments.

We maintain amounts on deposit with various financial institutions, which may, at times, exceed federally insured limits. However, management periodically evaluates the credit-worthiness of those institutions, and we have not experienced any losses on such deposits.

Accounts Receivable

Our accounts receivable are geographically dispersed. We do not obtain collateral relating to our accounts receivable. We do not believe there are any significant concentrations of revenues from any particular customer or group of customers that would subject us to any significant credit risks in the collection of our accounts receivable. We report accounts receivable at the estimated net realizable amount we expect to collect from our customers.

Additions to the allowance for doubtful accounts are made by means of the provision for doubtful accounts. We write-off uncollectible accounts receivable against the allowance for doubtful accounts after exhausting collection efforts. For each of the periods presented, we performed an analysis of our historical cash collection patterns and considered the impact of any known material events in determining the allowance for doubtful accounts. See Note 4 — Accounts Receivable for further discussion.

Derivative Instruments

We hold derivatives for risk management purposes and not for trading. We use derivatives to mitigate uncertainty and volatility caused by underlying exposures to aluminum prices, foreign exchange rates, interest rates, and energy prices. The fair values of all derivative instruments are recognized as assets or liabilities at the balance sheet date and are reported gross.

We may be exposed to losses in the future if the counterparties to our derivative contracts fail to perform. We are satisfied that the risk of such non-performance is remote due to our monitoring of credit exposures. Additionally, we enter into master netting agreements with contractual provisions that allow for netting of counterparty positions in case of default, and we do not face credit contingent provisions that would result in the posting of collateral.

Prior to the adoption of ASU 2017-12 *Derivatives and Hedging: Targeted Improvements to Accounting for Hedging Activities*, we were required to separately measure and record ineffectiveness, which is the amount by which the hedging instrument did not offset the changes in the fair value or cash flows of hedged items. We recorded the gain or loss related to the ineffective portion of derivative instruments, if any, in "Other (income) expense, net. Pursuant to our adoption of the provisions of ASU 2017-12 in the fourth quarter of fiscal 2018, we are no longer required to separately measure and recognize hedge ineffectiveness in our current period earnings. Upon adoption of ASU 2017-12, for cash flow hedges we will recognize and defer the entire periodic change in the fair value of the hedging instrument in other comprehensive income (loss). The amounts recorded in other comprehensive income (loss) will subsequently be reclassified to earnings in the same line item impacted by the hedged item when the hedged item affects earnings.

Prior to the adoption of ASU 2017-12, we assessed and measured hedge effectiveness on our aluminum and natural gas programs based on all pricing components of the hedged item. Pursuant to the adoption of ASU 2017-12, we will apply hedge accounting to only a specific component of the hedged item for these programs simplifying the application of hedge accounting and better aligning our risk management objectives, activities and financial reporting.

For derivatives designated as cash flow hedges or net investment hedges, we assess hedge effectiveness by formally evaluating the high correlation of the expected future cash flows of the hedged item and the derivative hedging instrument. The effective portion of gain or loss on the derivative is included in other comprehensive income (OCI) and reclassified to earnings in the period in which earnings are impacted by the hedged items or in the period that the transaction becomes probable of not occurring. Gains or losses representing reclassifications of OCI to earnings are recognized in the line item most reflective of the underlying risk exposure. We exclude the time value component of foreign currency and aluminum price risk hedges when measuring and assessing ineffectiveness to align our accounting policy with risk management objectives when it is necessary. If at any time during the life of a cash flow hedge relationship we determine that the relationship is no longer effective, the derivative will no longer be designated as a cash flow hedge and future gains or losses on the derivative will be recognized in "Other expenses, net".

For derivatives designated as fair value hedges, we assess hedge effectiveness by formally evaluating the high correlation of changes in the fair value of the hedged item and the derivative hedging instrument. The changes in the fair values of the underlying hedged items are reported in "Prepaid expenses and other current assets," "Other long-term assets", "Accrued expenses and other current liabilities," and "Other long-term liabilities" in the consolidated balance sheets. Changes in the fair values of these derivatives and underlying hedged items generally offset and the effective portion is recorded in "Net sales" consistent with the underlying hedged item and the net ineffectiveness is recorded in "Other (income) expense, net."

If no hedging relationship is designated, gains or losses are recognized in "Other expenses, net" in our current period earnings.

Consistent with the cash flows from the underlying risk exposure, we classify cash settlement amounts associated with designated derivatives as part of either operating or investing activities in the consolidated statements of cash flows. If no hedging relationship is designated, we classify cash settlement amounts as part of investing activities in the consolidated statement of cash flows.

The majority of our derivative contracts are valued using industry-standard models that use observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices for foreign exchange rates. See Note 15 — Financial Instruments and Commodity Contracts and Note 17 — Fair Value Measurements for additional discussion related to derivative instruments.

Inventories

We carry our inventories at the lower of their cost or net realizable value, reduced for obsolete and excess inventory. We use the average cost method to determine cost. Included in inventories are stores inventories, which are carried at average cost. See Note 5 — Inventories for further discussion.

Property, Plant and Equipment

We record land, buildings, leasehold improvements and machinery and equipment at cost. We record assets under capital lease obligations at the lower of their fair value or the present value of the aggregate future minimum lease payments as of the beginning of the lease term. We generally depreciate our assets using the straight-line method over the shorter of the estimated useful life of the assets or the lease term, excluding any lease renewals, unless the lease renewals are reasonably assured. See Note 6 — Property, Plant and Equipment for further discussion. We assign useful lives to and depreciate major components of our property, plant and equipment.

The ranges of estimated useful lives are as follows:

	Years
Buildings	30 to 40
Leasehold improvements	7 to 20
Machinery and equipment	2 to 25
Furniture, fixtures and equipment	3 to 10
Equipment under capital lease obligations	5 to 15

Most of our large scale machinery, including hot mills, cold mills, continuous casting mills, furnaces and finishing mills have useful lives of 15 to 25 years. Supporting machinery and equipment, including automation and work rolls, have useful lives of 2 to 15 years.

Maintenance and repairs of property and equipment are expensed as incurred. We capitalize replacements and improvements that increase the estimated useful life of an asset, and we capitalize interest on major construction and development projects while in progress. Capitalized interest costs are included in property, plant and equipment and are depreciated over the useful life of the related asset.

We retain fully depreciated assets in property and accumulated depreciation accounts until we remove them from service. In the case of sale, retirement or disposal, the asset cost and related accumulated depreciation balances are removed from the respective accounts, and the resulting net amount, after consideration of any proceeds, is included as a gain or loss in "Other expenses, net" or "Gain on assets held for sale" in our consolidated statements of operations.

We account for operating leases under the provisions of ASC 840, *Leases*. This pronouncement requires us to recognize escalating rents, including any rent holidays, on a straight-line basis over the term of the lease for those lease agreements where we receive the right to control the use of the entire leased property at the beginning of the lease term.

Goodwill

We test for impairment at least annually as of the last day of February of each fiscal year, unless a triggering event occurs that would require an interim impairment assessment. We do not aggregate components of operating segments to arrive at our reporting units and, as such, our reporting units are the same as our operating segments.

In performing our goodwill impairment test, we have the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the estimated fair value of a reporting unit is less than its carrying amount. If we perform a qualitative assessment and determine that an impairment is more likely than not, then we perform the two-step quantitative impairment test, otherwise no further analysis is required. We also may elect not to perform the qualitative assessment and, instead, proceed directly to the two-step quantitative impairment test. The ultimate outcome of the goodwill impairment assessment will be the same whether we choose to perform the qualitative assessment or proceed directly to the two-step quantitative impairment test.

For the years ended March 31, 2019, 2018 and 2017 we elected to perform the two-step quantitative impairment test. No goodwill impairment was identified in any of the years. See Note 7 — Goodwill and Intangible Assets for further discussion.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

We use the present value of estimated future cash flows to establish the estimated fair value of our reporting units as of the testing date. This approach includes many assumptions related to future growth rates, discount factors and tax rates, among other considerations. Changes in economic and operating conditions impacting these assumptions could result in goodwill impairment in future periods. When available and as appropriate, we use the market approach to corroborate the estimated fair value. If the carrying amount of a reporting unit's goodwill exceeds its estimated fair value, the second step of the impairment test is performed in order to determine the amount of impairment loss, if any. The second step compares the implied fair value of the reporting unit's goodwill with the carrying amount of that goodwill. If the carrying amount of the reporting unit's goodwill exceeds its implied fair value, we would recognize an impairment charge in an amount equal to that excess in our consolidated statements of operations.

When a business within a reporting unit is disposed of, goodwill is allocated to the gain or loss on disposition using the relative fair value methodology.

Long-Lived Assets and Other Intangible Assets

We amortize the cost of intangible assets over their respective estimated useful lives to their estimated residual value. See Note 7 — Goodwill and Intangible Assets for further discussion.

We assess the recoverability of long-lived assets (excluding goodwill) and finite-lived intangible assets, whenever events or changes in circumstances indicate that we may not be able to recover the asset's carrying amount. We measure the recoverability of assets to be held and used by a comparison of the carrying amount of the asset (groups) to the expected, undiscounted future net cash flows to be generated by that asset (groups), or, for identifiable intangible assets, by determining whether the amortization of the intangible asset balance over its remaining life can be recovered through undiscounted future cash flows. The amount of impairment of identifiable intangible assets is based on the present value of estimated future cash flows. We measure the amount of impairment of other long-lived assets and intangible assets (excluding goodwill) as the amount by which the carrying value of the asset exceeds the fair value of the asset, which is generally determined as the present value of estimated future cash flows or as the appraised value. Impairments of long-lived assets and intangible assets are included in "Restructuring and impairment, net" in the consolidated statement of operations. See Note 3 — Restructuring and Impairment for further discussions.

Assets and Liabilities Held for Sale

We classify long-lived assets (disposal groups) to be sold as held for sale in the period in which all of the following criteria are met: management, having the authority to approve the action, commits to a plan to sell the asset (disposal group); the asset (disposal group) is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such assets (disposal groups); an active program to locate a buyer and other actions required to complete the plan to sell the asset (disposal group) have been initiated; the sale of the asset (disposal group) is probable, and transfer of the asset (disposal group) is expected to qualify for recognition as a completed sale within one year, except if events or circumstances beyond our control extend the period of time required to sell the asset (disposal group) beyond one year; the asset (disposal group) is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

We initially measure a long-lived asset (disposal group) that is classified as held for sale at the lower of its carrying value or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met. Conversely, gains are not recognized on the sale of a long-lived asset (disposal group) until the date of sale. We assess the fair value of a long-lived asset (disposal group) less any costs to sell each reporting period it remains classified as held for sale and report any reduction in fair value as an adjustment to the carrying value of the asset (disposal group). Upon being classified as held for sale we cease depreciation. We continue to depreciate long-lived assets to be disposed of other than by sale.

Upon determining that a long-lived asset (disposal group) meets the criteria to be classified as held for sale, we report the assets and liabilities of the disposal group in the line items "Assets held for sale" and "Liabilities held for sale," respectively in our consolidated balance sheets.

Investment in and Advances to Non-Consolidated Affiliates

We assess the potential for other-than-temporary impairment of our equity method investments when impairment indicators are identified. We consider all available information, including the recoverability of the investment, the earnings and near-term prospects of the affiliate, factors related to the industry, conditions of the affiliate, and our ability, if any, to influence the management of the affiliate. We assess fair value based on valuation methodologies, as appropriate, including the present value of estimated future cash flows, estimates of sales proceeds, and external appraisals. If an investment is considered to be impaired and the decline in value is other than temporary, we record an appropriate write-down. See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further discussion.

Financing Costs

We amortize financing costs and premiums, and accrete discounts, over the remaining life of the related debt using the effective interest amortization method, unless the impact of utilizing the straight-line method results in an immaterial difference. The expense is included in “Interest expense and amortization of debt issuance costs” in our consolidated statements of operations. We record discounts and unamortized financing costs as a direct deduction from, or premiums as a direct addition to, the face amount of the financing.

Fair Value of Financial Instruments

ASC 820, *Fair Value Measurements and Disclosures* (ASC 820), defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. ASC 820 also applies to measurements under other accounting pronouncements, such as ASC 825, *Financial Instruments* (ASC 825) that require or permit fair value measurements. ASC 825 requires disclosures of the fair value of financial instruments. Our financial instruments include: cash and cash equivalents; certificates of deposit; accounts receivable; accounts payable; foreign currency, energy and interest rate derivative instruments; cross-currency swaps; metal option and forward contracts; share-based compensation; related party notes receivable and payable; letters of credit; short-term borrowings and long-term debt.

The carrying amounts of cash and cash equivalents, certificates of deposit, accounts receivable, accounts payable and current related party notes receivable and payable approximate their fair value because of the short-term maturity and highly liquid nature of these instruments. The fair value of our letters of credit is deemed to be the amount of payment guaranteed on our behalf by third party financial institutions. We determine the fair value of our short-term borrowings and long-term debt based on various factors including maturity schedules, call features and current market rates. We also use quoted market prices, when available, or the present value of estimated future cash flows to determine fair value of our share-based compensation liabilities, short-term borrowings and long-term debt. When quoted market prices are not available for various types of financial instruments (such as currency, energy and interest rate derivative instruments, swaps, options and forward contracts), we use standard pricing models with market-based inputs, which take into account the present value of estimated future cash flows. See Note 17 — Fair Value Measurements for further discussion.

Pensions and Postretirement Benefits

Our pension obligations relate to funded defined benefit pension plans in the U.S., Canada, Switzerland and the U.K., unfunded pension plans in the U.S., Canada, and Germany, and unfunded lump sum indemnities in France and Italy; and partially funded lump sum indemnities in South Korea. Our other postretirement obligations include unfunded health care and life insurance benefits provided to retired employees in Canada, the U.S. and Brazil.

We account for our pensions and other postretirement benefits in accordance with ASC 715, *Compensation — Retirement Benefits* (ASC 715). We recognize the funded status of our benefit plans as a net asset or liability, with an offsetting adjustment to accumulated other comprehensive income in shareholder's (deficit) equity. The funded status is calculated as the difference between the fair value of plan assets and the benefit obligation. For the years ended March 31, 2019 and 2018, we used March 31 as the measurement date.

We use standard actuarial methods and assumptions to account for our pension and other postretirement benefit plans. Pension and postretirement benefit obligations are actuarially calculated using management's best estimates of the rate used to discount the future estimated liability, the long-term rate of return on plan assets, and several assumptions related to the employee workforce (compensation increases, health care cost trend rates, expected service period, retirement age, and mortality). Pension and postretirement benefit expense includes the actuarially computed cost of benefits earned during the current service period, the interest cost on accrued obligations, the expected return on plan assets based on fair market value and the straight-line amortization of net actuarial gains and losses and adjustments due to plan amendments, curtailments, and settlements. Net actuarial gains and losses are amortized over periods of 15 years or less, which represent the group's average future service life of the employees or the group's average life expectancy. See Note 13 — Postretirement Benefit Plans for further discussion.

Noncontrolling Interests in Consolidated Affiliates

These financial statements reflect the application of ASC 810, *Consolidations* (ASC 810), which establishes accounting and reporting standards that require: (i) the ownership interest in subsidiaries held by parties other than the parent to be clearly identified and presented in the consolidated balance sheet within shareholder's (deficit) equity, but separate from the parent's (deficit) equity; (ii) the amount of consolidated net income attributable to the parent and the noncontrolling interest to be clearly identified and presented on the face of the consolidated statement of operations and (iii) changes in a parent's ownership interest while the parent retains its controlling financial interest in its subsidiary to be accounted for consistently.

Our consolidated financial statements include all assets, liabilities, revenues and expenses of less-than-100%-owned affiliates that we control or for which we are the primary beneficiary. We record a noncontrolling interest for the allocable portion of income or loss and comprehensive income or loss to which the noncontrolling interest holders are entitled based upon their ownership share of the affiliate. Distributions made to the holders of noncontrolling interests are charged to the respective noncontrolling interest balance.

Losses attributable to the noncontrolling interest in an affiliate may exceed our interest in the affiliate's equity. The excess, and any further losses attributable to the noncontrolling interest, shall be attributed to those interests. The noncontrolling interest shall continue to be attributed its share of losses even if that attribution results in a deficit noncontrolling interest balance.

Environmental Liabilities

We record accruals for environmental matters when it is probable that a liability has been incurred and the amount of the liability can be reasonably estimated, based on current law and existing technologies. We adjust these accruals periodically as assessment and remediation efforts progress or as additional technical or legal information becomes available. Accruals for environmental liabilities are stated at undiscounted amounts. Environmental liabilities are included in our consolidated balance sheets in "Accrued expenses and other current liabilities" and "Other long-term liabilities," depending on their short- or long-term nature. Any receivables for related insurance or other third party recoveries for environmental liabilities are recorded when it is probable that a recovery will be realized and are included in our consolidated balance sheets in "Prepaid expenses and other current assets."

Costs related to environmental matters are charged to expense. Estimated future incremental operations, maintenance and management costs directly related to remediation are accrued in the period in which such costs are determined to be probable and estimable. See Note 20 — Commitments and Contingencies for further discussion.

Litigation Contingencies

We accrue for loss contingencies associated with outstanding litigation, claims and assessments for which management has determined it is probable that a loss contingency exists and the amount of loss can be reasonably estimated. We expense professional fees associated with litigation claims and assessments as incurred. See Note 20 — Commitments and Contingencies for further discussion.

Income Taxes

We account for income taxes using the asset and liability method. This approach recognizes the amount of income taxes payable or refundable for the current year, as well as deferred tax assets and liabilities for the future tax consequence of events recognized in the consolidated financial statements and income tax returns. Deferred income tax assets and liabilities are adjusted to recognize the effects of changes in tax laws or enacted tax rates. Under ASC 740 *Income Taxes*, (ASC 740) a valuation allowance is required when it is more likely than not that some portion of the deferred tax assets will not be realized. Realization is dependent on generating sufficient taxable income through various sources.

We record tax benefits related to uncertain tax positions taken or expected to be taken on a tax return when such benefits meet a more than likely than not threshold. Otherwise, these tax benefits are recorded when a tax position has been effectively settled, the statute of limitation has expired or the appropriate taxing authority has completed their examination. Interest and penalties related to uncertain tax positions are recognized as part of the provision for income taxes and are accrued beginning in the period that such interest and penalties would be applicable under relevant tax law until such time that the related tax benefits are recognized. See Note 19 — Income Taxes for further discussion.

Share-Based Compensation

In accordance with ASC 718, *Compensation — Stock Compensation* (ASC 718), we recognize compensation expense for a share-based award over an employee's requisite service period based on the award's grant date fair value, subject to adjustment. Our share-based awards are settled in cash and are accounted for as liability based awards. As such, liabilities for awards under these plans are required to be measured at fair value at each reporting date until the date of settlement. See Note 12 — Share-Based Compensation for further discussion.

Foreign Currency Translation

The assets and liabilities of foreign operations, whose functional currency is other than the U.S. dollar (located in Europe and Asia), are translated to U.S. dollars at the period end exchange rates and revenues and expenses are translated at average exchange rates for the period. Differences arising from this translation are included in the currency translation adjustment (CTA) component of AOCI and Noncontrolling Interest, both of which are on the balance sheet. If there is a planned or completed sale or liquidation of our ownership in a foreign operation, the relevant CTA is recognized in our consolidated statement of operations.

For all operations, the monetary items denominated in currencies other than the functional currency are remeasured at period-end exchange rates and transaction gains and losses are included in "Other expenses, net" in our consolidated statements of operations. Non-monetary items are remeasured at historical rates.

Recently Adopted Accounting Standards

Effective for the second quarter of fiscal 2019, we early adopted Accounting Standards Update (ASU) 2018-13, *Fair Value Measurement (Topic 820) Disclosure Framework - Change to the Disclosure Requirements for Fair Value Measurement*, which modified the disclosure requirements on fair value measurements in Topic 820 including the consideration of costs and benefits. The amendments relate to changes in disclosures on unrealized gains and losses, the disclosure of the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty were applied prospectively, where applicable. Due to the immateriality of the electricity swap, which is our only Level 3 derivative contract, the adoption of this standard does not have a material impact on the consolidated financial statements and disclosures.

Effective for the first quarter of fiscal 2019, we adopted ASU 2014-09, *Revenue from Contracts with Customers (Topic 606)*, and all the related amendments, which supersedes the former standard, ASC 605, *Revenue Recognition*. The new standard requires entities to recognize revenue based on the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for these goods or services. We adopted Topic 606 using the modified retrospective transition approach. We determined that our existing revenue recognition practices were in compliance with Topic 606. Accordingly, there was no cumulative effect adjustment to the opening balance of retained earnings in the consolidated balance sheet in the first quarter of fiscal 2019, as the adoption did not result in a change to our timing of revenue recognition. See Note 2 — Revenue from Contracts with Customers for additional disclosures related to the adoption of this standard. The adoption of this standard does not have a material impact on the consolidated financial statements and disclosures.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Effective for the first quarter of fiscal 2019, we adopted ASU 2018-02, *Income Statement-Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income*. This standard provides an option to reclassify stranded tax effects within Accumulated other comprehensive income (loss) (AOCI) to Retained earnings due to the U.S. federal corporate income tax rate change in the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"). This standard is effective for interim and annual reporting periods beginning after December 15, 2018 and early adoption is permitted. Additionally, the ASU requires new disclosures by all companies. Other than those effects related to the Act, the Company releases the income tax effect from AOCI in the period when the underlying transaction impacts earnings. We early adopted this accounting standard in the first quarter of fiscal 2019 and reclassified \$16 million into retained earnings of our common shareholder from AOCI. This reclassification consists of deferred taxes originally recorded in AOCI at rates that exceeded the newly enacted U.S. federal corporate tax rate. There was no impact to net income.

Effective for the first quarter of fiscal 2019, we adopted ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*. This update was issued primarily to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost. The new standard requires entities to (1) disaggregate the current service cost component from the other components of net benefit cost (the "other components") and present the other components within non-operating income and (2) present the other components elsewhere in the results of operations and outside of income from operations if that subtotal is presented. In addition, the new standard requires entities to disclose the results of operations line items that contain the other components if they are not presented on appropriately described separate lines. We adopted this standard on a retrospective basis and utilized the practical expedient. As a result, we reclassified the net periodic benefit cost, exclusive of service cost, to "Other expenses, net" for the comparative periods. We reclassified, with no impact to net income, net periodic benefit cost totaling \$42 million (\$19 million from "Cost of goods sold (exclusive of depreciation and amortization)" and \$23 million from "Selling, general and administrative expenses") for the year ended March 31, 2018 and \$49 million (\$24 million from "Cost of goods sold (exclusive of depreciation and amortization)" and \$25 million from "Selling, general and administrative expenses") for the year ended March 31, 2017 into "Other expenses, net".

Effective for the first quarter of fiscal 2019, we adopted ASU 2016-18, *Statement of Cash Flows (Topic 230) -Restricted Cash*. The new standard requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. As a result, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning of period and end of period total amounts shown on the consolidated statement of cash flows. Transfers between restricted cash and cash and cash equivalents will no longer be presented in the operating section of the consolidated statement of cash flows. We adopted this standard on a retrospective basis and disclose the nature of the restrictions for material balances of restricted cash.

Amounts included in restricted cash largely represent those required to be set aside for employee benefits. The following table reconciles cash and cash equivalents as reported on the consolidated balance sheet to cash, cash equivalents and restricted cash as reported on the consolidated statement of cash flows (in millions). Prior period amounts have been adjusted to conform to the current period presentation.

	March 31,	
	2019	2018
Cash and cash equivalents	\$ 950	\$ 920
Restricted cash (included in "Other long-term assets")	10	12
Total cash, cash equivalents, and restricted cash	\$ 960	\$ 932

Effective for the first quarter of fiscal 2019, we adopted ASU 2016-16, *Income Taxes (Topic 740) - Intra-Entity Asset Transfers of Assets Other than Inventory*. The new standard eliminates the exception for all intra-entity sales of assets other than inventory. It requires the tax effect of intra-entity sales of assets other than inventory to be recognized currently which will impact Novelis' effective tax rate. The changes require the current and deferred income tax consequences of the intra-entity transfer to be recorded when the transaction occurs. We have adopted this standard on a modified retrospective basis and the cumulative effect of the change on retained earnings is \$36 million with a corresponding impact to deferred tax balances.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Effective for the first quarter of fiscal 2019, we adopted ASU 2016-15, *Statement of Cash Flows (Topic 230) - Classification of Certain Cash Receipts and Cash Payments*. The new standard applies to all entities that are required to present a statement of cash flows under Topic 230 and addresses eight specific cash flow items to provide clarification and reduce the diversity in presentation of these items. We adopted this standard on a retrospective basis and we reclassified the cash received related to beneficial interest in certain factored accounts receivables from operating activities to investing activities. We reclassified \$13 million and \$12 million for the years ended March 31, 2018 and March 31, 2017, respectively, from accounts receivable within operating activities into the line item "Other" within investing activities on the consolidated statement of cash flows.

Effective for the first quarter of fiscal 2019, we adopted ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*. This update was issued to provide clarity and reduce both (1) diversity in practice and (2) cost and complexity when applying the standard in Topic 718, Compensation-Stock Compensation, to a change to the terms or conditions of a share-based payment award. An entity may change the terms or conditions of a share-based payment award for many different reasons, and the nature and effect of the change can vary significantly. Under the new standard, modification accounting is required only if the fair value, the vesting conditions, or the classification of the award (as equity or liability) changes as a result of the change in terms or conditions. Management has determined that the adoption of this standard does not have a material impact on the consolidated financial statements. This standard will need to be considered if Novelis initiates a modification that is determined to be a substantive change to an outstanding stock-based award.

Effective for the first quarter of fiscal 2019, we adopted ASU 2017-05, *Other Income-Gains and Losses from the Derecognition of Non-financial Assets (Subtopic 610-20): Clarifying the Scope of Asset Derecognition Guidance and Accounting for Partial Sales of Non-financial Assets*. The amendments in this update include (i) clarification that non-financial assets within the scope of ASC 610-20 may include non-financial assets transferred within a legal entity to a counterparty; (ii) clarification that an entity should allocate consideration to each distinct asset by applying the standard in ASC 606 on allocating the transaction price to performance obligations; and (iii) a requirement for entities to derecognize a distinct non-financial asset or distinct in substance non-financial asset in a partial sale transaction when it does not have (or ceases to have) a controlling financial interest in the legal entity that holds the asset in accordance with ASC 610, and transfers control of the asset in accordance with ASC 606. Management has determined that the adoption of this standard does not have an impact on our consolidated financial statements.

Effective for the first quarter of fiscal 2019, we adopted ASU 2017-01, *Clarifying the Definition of a Business (Topic 805)*, which provides guidance on evaluating whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The definition of a business affects many areas of accounting including acquisitions, disposals, goodwill, and consolidation. The new standard amends ASC 805 to provide a more robust framework to use in determining when a set of assets and activities is a business. In addition, the amendments provide more consistency in applying the guidance, reduces the costs of application, and makes the definition of a business more operable. Management has determined that the adoption of this standard does not have an impact on our consolidated financial statements.

Recently Issued Accounting Standards

In October 2018, the Financial Accounting Standards Board (FASB) issued ASU 2018-17, *Consolidation (Topic 810): Targeted Improvements to Related Party Guidance for Variable Interest Entities*, to eliminate the requirement that entities consider indirect interests held through related parties under common control in their entirety when assessing whether a decision-making fee is a variable interest. Instead, the reporting entity will consider such indirect interests on a proportionate basis. These changes become effective for Novelis on April 1, 2020 and interim periods within that fiscal year. Early adoption is permitted. The Company is currently evaluating the impact of this standard.

In October 2018, the FASB issued ASU 2018-16, *Derivatives and Hedging (Topic 815): Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes*, to permit the use of the OIS based on the SOFR as a U.S. benchmark interest rate for purposes of hedge accounting under Topic 815 as requested by the Federal Reserve Board during deliberations leading to the issuance of ASU 2017-12. The FASB recognized that although the OIS rate based on SOFR is not yet widely recognized and quoted within the U.S. financial market, the attributes of the repo rates underlying the calculation of SOFR are recognized. As we have already adopted ASU 2017-12, these changes become effective for Novelis on April 1, 2019 and interim periods within those fiscal years. Early adoption is permitted in any interim period if an entity already has adopted ASU 2017-12. The Company does not currently have any interest rate derivative instruments, but is currently evaluating the potential future impact of this standard.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In August 2018, the FASB issued ASU 2018-15, *Intangibles-Goodwill and Other Internal-Use Software (Topic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that Is a Service Contract*, which requires capitalization of implementation costs incurred in a hosting arrangement that is a service contract. This change will better align with requirements for capitalizing implementation costs incurred to develop or obtain internal-use software (and hosting arrangements that include an internal-use software license). The accounting for the service element of a hosting arrangement that is a service contract is not affected. These changes become effective for Novelis on April 1, 2020 and interim periods within those fiscal years. Early adoption is permitted. The Company is currently evaluating the impact of the new standard.

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Topic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans*, which amends ASC 715 to add, remove and clarify requirements related to defined benefit pension and other postretirement plans. The ASU added requirements for new disclosures such as now requiring a narrative description of the reasons for significant gains and losses affecting the benefit obligation for the period and also an explanation of any other significant changes in the benefit obligation or plan assets that are not otherwise apparent in the other disclosures required by ASC 715. Further, the ASU removes some currently required disclosures such as (a) the requirement (for public entities) to disclose the effects of a one-percentage-point change on the assumed health care costs and the effect of this change in rates on service cost, interest cost, and the benefit obligation for postretirement health care benefits and (b) the amounts in accumulated other comprehensive income "OCI" expected to be recognized in net periodic benefit costs over the next fiscal year. These changes become effective for Novelis for fiscal year ended March 31, 2022. Early adoption is permitted. The Company is currently evaluating the impact of this standard.

In July 2018, the FASB issued ASU 2018-09, *Codification Improvements*, which provides various minor codification updates and improvements to address comments that the FASB had received regarding unclear or vague accounting guidance. The standard is effective for fiscal years beginning after December 15, 2018, including interim reporting periods within that fiscal year. The Company is currently evaluating the impact of the guidance on its consolidated financial statements and does not anticipate that this guidance will have a material impact.

In January 2017, the FASB issued ASU 2017-04, *Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which removes Step 2 from the goodwill impairment test. As amended, the goodwill impairment test will consist of one step comparing the fair value of a reporting unit with its carrying amount. Under the simplified model, a goodwill impairment is calculated as the difference between the carrying amount of the reporting unit and its fair value, but not to exceed the carrying amount of goodwill allocated to that reporting unit. Early adoption is permitted. These changes become effective for Novelis on April 1, 2020. This standard will need to be considered each time Novelis performs an assessment of goodwill for impairment under the quantitative test. We are currently evaluating the impact of this standard and we do not expect the adoption of this standard will have an impact on the consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Financial Instrument-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments*, which provides financial statement users with more decision-useful information about expected credit losses on financial instruments and other commitments to extend credit held by a reporting entity at each reporting date. The "current expected credit loss" (CECL) model requires the Company to measure all expected credit losses for financial instruments held at the reporting date based on historical experience, current conditions, and reasonable supportable forecasts. These changes become effective for Novelis for fiscal year ended March 31, 2021. Early adoption is permitted. We are currently evaluating the impact of this standard and we do not expect the adoption of this standard will have an impact on the consolidated financial statements.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, along with additional technical improvements, practical expedients, and clarifications that have since been issued, which when effective, will require organizations that lease assets to recognize assets and liabilities for the rights and obligations created by the leases on balance sheet. A lessee will be required to recognize assets and liabilities for leases with terms that exceed twelve months. The standard will also require disclosures to help investors and financial statement users better understand the amount, timing and uncertainty of cash flows arising from leases. The disclosures include qualitative and quantitative requirements, providing additional information about the amounts recorded in the financial statements. These changes become effective for Novelis April 1, 2019 for the annual reporting period (including interim periods therein). Novelis has established a cross-functional project team to lead the implementation effort. We will adopt the standard using a modified retrospective approach, applying the standard's transition provisions at the beginning of the period of adoption. We are electing the package of practical expedients allowing the Company to not reassess whether any expired or existing contracts are, or contain, leases, the lease classification for any expired or existing leases or initial direct costs for any expired or existing leases. Based on our preliminary assessment, we expect the adoption of this ASU to result in the recognition of \$90 million to \$135 million of right-of-use assets and lease liabilities on our consolidated balance sheets with an immaterial impact to the opening balance of retained earnings. The adoption of this ASU is not expected to have a material effect to the consolidated statement of operations or the consolidated statement of cash flows.

2. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company's contracts with customers are comprised of purchase orders along with standard terms and conditions. These contracts with customers typically consist of the manufacture of products which represent single performance obligations that are satisfied upon transfer of control of the product to the customer at a point in time. Transfer of control is assessed based on alternative use of the products we produce and our enforceable right to payment for performance to date under the contract terms. Transfer of control and revenue recognition generally occur upon shipment or delivery of the product, which is when title, ownership and risk of loss pass to the customer and is based on the applicable shipping terms. The shipping terms vary across all businesses and depend on the product, the country of origin, and the type of transportation (truck, train, or vessel). The length of payment terms can vary per contract but none extend beyond one year. Revenue is recognized net of any volume rebates or other incentives.

We disaggregate revenue from contracts with customers on a geographic basis based on our segment view. This disaggregation also achieves the disclosure objective to depict how the nature, amount, timing, and uncertainty of revenue and cash flows are affected by economic factors. We manage our activities on the basis of geographical regions and are organized under four operating segments: North America, South America, Asia and Europe. See Note 21 — Segment, Geographical Area, Major Customer and Major Supplier Information for further information about our segment revenue.

3. RESTRUCTURING AND IMPAIRMENT

"Restructuring and impairment, net" is reflected on our consolidated statement of operations and includes restructuring costs, impairments and other non-cash related expenses. As of March 31, 2019, \$14 million is included in "Accrued expenses and other current liabilities" and the remaining is within "Other long-term liabilities" in our accompanying consolidated balance sheet.

	Total restructuring liabilities	Other restructuring charges (A)	Total restructuring charges	Other impairments (B)	Total restructuring and impairments, net
Balance as of March 31, 2016	\$ 27				
Fiscal 2017 Activity:					
Expenses	8	—	8	2	10
Cash payments	(13)				
Foreign currency remeasurement and other (C)	2				
Balance as of March 31, 2017	\$ 24				
Fiscal 2018 Activity:					
Expenses	19	9	28	6	34
Cash payments	(7)				
Balance as of March 31, 2018	\$ 36				
Fiscal 2019 Activity:					
Expenses	2	—	2	—	2
Cash payments	(16)				
Foreign currency remeasurement and other (C)	(5)				
Balance as of March 31, 2019	\$ 17				

(A) Other restructuring charges include expenses related to a restructuring activity that are not recorded through the restructuring liability, such as impairments and other non-cash expenses.

(B) Other impairment charges are not related to a restructuring activity.

(C) This primarily relates to the remeasurement of Brazilian real denominated restructuring liabilities.

Restructuring and impairment activities by segment are detailed below:

North America

North America recognized \$1 million in restructuring expenses for fiscal 2019 and 2017 both due to a fiscal 2012 plant closure. Restructuring actions prior to April 1, 2016 totaled \$40 million and was attributed to impairments of \$33 million and severance and other exit related expenses of \$7 million. As of March 31, 2019, the restructuring liability for the North America region totaled \$1 million.

The North America segment recognized less than \$4 million in impairment charges on intangible software assets unrelated to restructuring for fiscal 2018 and \$2 million in impairment charges on fixed assets unrelated to restructuring for fiscal 2017.

Europe

Europe recognized \$25 million in restructuring expenses for fiscal 2018 related to the closure of certain non-core operations; severance and associated legal costs totaled \$16 million and asset impairments totaled \$9 million. In fiscal 2017, Europe recognized \$2 million of restructuring expenses related to corporate restructuring. Prior to April 1, 2016, \$50 million of restructuring expenses was incurred related to business optimization efforts and corporate restructuring. As of March 31, 2019, the restructuring liability for the Europe region totaled \$3 million.

Europe recognized less than \$2 million in asset impairments unrelated to restructuring during fiscal 2018.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Asia

Asia recognized \$1 million in impairment charges on long-lived assets unrelated to restructuring in fiscal 2018.

South America

In fiscal 2019, 2018, 2017, South America recognized restructuring expenses of \$1 million, \$3 million and \$5 million, respectively, related to the closure of smelter facilities. Restructuring actions prior to April 1, 2016 totaled \$82 million and were primarily related to the closure of smelter facilities along with prior restructuring programs. As of March 31, 2019, the restructuring liability for the South America region totaled \$13 million.

4. ACCOUNTS RECEIVABLE

“Accounts receivable, net” consists of the following (in millions).

	March 31,	
	2019	2018
Trade accounts receivable	\$ 1,332	\$ 1,260
Other accounts receivable	92	100
Accounts receivable — third parties	1,424	1,360
Allowance for doubtful accounts — third parties	(7)	(7)
Accounts receivable, net — third parties	\$ 1,417	\$ 1,353
Accounts receivable, net — related parties	\$ 164	\$ 242

Allowance for Doubtful Accounts

As of March 31, 2019 and 2018, our allowance for doubtful accounts represented approximately 0.5% of gross accounts receivable - third parties (exclusive of accounts receivable - related parties).

Activity in the allowance for doubtful accounts is as follows (in millions).

	Balance at Beginning of Period	Additions Charged to Expense	Accounts Recovered/ (Written-Off)	Foreign Exchange and Other	Balance at End of Period
Year Ended March 31, 2019	\$ 7	\$ —	\$ —	\$ —	\$ 7
Year Ended March 31, 2018	\$ 6	\$ 1	\$ —	\$ —	\$ 7
Year Ended March 31, 2017	\$ 3	\$ 3	\$ —	\$ —	\$ 6

Factoring of Trade Receivables

We factor trade receivables (collectively, we refer to these as "factoring") based on local cash needs, as well as attempting to balance the timing of cash flows of trade payables and receivables. Factored invoices are not included in our consolidated balance sheets when we do not retain a financial or legal interest. If a financial or legal interest is retained, we classify these factorings as secured borrowings.

The following tables summarize amounts relating to our factoring activities (in millions).

	Year Ended March 31,		
	2019	2018	2017
Factoring expense	\$ 46	\$ 39	\$ 16

	March 31,	
	2019	2018
Factored receivables outstanding	\$ 500	\$ 547

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

5. INVENTORIES

“Inventories” consists of the following (in millions).

	March 31,	
	2019	2018
Finished goods	\$ 354	\$ 416
Work in process	684	730
Raw materials	254	248
Supplies	168	166
Inventories	<u>\$ 1,460</u>	<u>\$ 1,560</u>

6. PROPERTY, PLANT AND EQUIPMENT

“Property, plant and equipment, net” consists of the following (in millions).

	March 31,	
	2019	2018
Land and property rights	\$ 155	\$ 148
Buildings	1,274	1,259
Machinery and equipment	4,290	4,179
	5,719	5,586
Accumulated depreciation and amortization	(2,731)	(2,644)
	2,988	2,942
Construction in progress	397	168
Property, plant and equipment, net (A)	\$ 3,385	\$ 3,110

(A) In fiscal 2019, we completed the acquisition of operating assets that we historically leased at our Sierre, Switzerland rolling facility from Constellium Valais SA (Constellium) for €197.5 million (approximately \$231 million).

For the years ended March 31, 2019, 2018 and 2017, we capitalized \$3 million, \$1 million and \$2 million of interest related to construction of property, plant and equipment and intangibles under development, respectively.

Depreciation expense related to "Property, plant and equipment, net" is shown in the table below (in millions).

	Year Ended March 31,		
	2019	2018	2017
Depreciation expense related to property, plant and equipment, net	\$ 286	\$ 290	\$ 299

Asset impairments

Impairment charges are recorded in "Restructuring and impairment, net." See Note 3 — Restructuring and Impairment for additional information.

Leases

We lease certain land, buildings and equipment under non-cancelable operating leases expiring at various dates. Operating leases generally have terms that are less than ten years, with one or more renewal options and terms to be negotiated at the time of renewal. Various facility leases include provisions for rent escalation to recognize increased operating costs or require us to pay certain maintenance and utility costs.

The following table summarizes rent expense included in our consolidated statements of operations (in millions):

	Year Ended March 31,		
	2019	2018	2017
Rent expense	\$ 27	\$ 27	\$ 24

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Future minimum lease payments as of March 31, 2019, for our operating and capital leases having an initial or remaining non-cancelable lease term in excess of one year are as follows (in millions).

Year Ending March 31,	Operating leases	Capital lease obligations
2020	\$ 29	\$ —
2021	22	—
2022	16	—
2023	12	—
2024	10	—
Thereafter	17	1
Total minimum lease payments	<u>\$ 106</u>	<u>\$ 1</u>
Less: interest portion on capital lease		—
Principal obligation on capital leases		<u>\$ 1</u>

Assets and related accumulated amortization under capital lease obligations as of March 31, 2019 and 2018 are as follows (in millions).

	March 31,	
	2019	2018
Assets under capital lease obligations:		
Buildings	\$ 1	\$ 12
Machinery and equipment	8	76
CWIP	1	2
	<u>10</u>	<u>90</u>
Accumulated amortization	(7)	(77)
	<u>\$ 3</u>	<u>\$ 13</u>

Asset Retirement Obligations

An asset retirement obligation is recognized in the period in which sufficient information exists to determine the fair value of the liability along with a corresponding increase to the carrying amount of the related property, plant and equipment which is then depreciated over its useful life. Our asset retirement obligations relate to sites, primarily in North America and Asia, that have government imposed or other legal remediation obligations. The following is a summary of our asset retirement obligation activity. The period end balances are included in “Other long-term liabilities” in our consolidated balance sheet (in millions).

	Balance at Beginning of Period	Obligations Incurred	Accretion	Foreign Exchange & Other Adjustments	Settlements	Balance at End of Period
Year Ended March 31, 2019	\$ 33	\$ 1	\$ —	\$ (5)	\$ —	\$ 29
Year Ended March 31, 2018	\$ 15	\$ 17	\$ —	\$ 1	\$ —	\$ 33
Year Ended March 31, 2017	\$ 15	\$ —	\$ —	\$ —	\$ —	\$ 15

7. GOODWILL AND INTANGIBLE ASSETS

There were no changes to the gross carrying amount or accumulated impairment of goodwill during the years ended March 31, 2019 and 2018. The following table summarizes “Goodwill” (in millions).

	March 31, 2019			March 31, 2018		
	Gross Carrying Amount	Accumulated Impairment	Net Carrying Value	Gross Carrying Amount	Accumulated Impairment	Net Carrying Value
North America	\$ 1,145	\$ (860)	\$ 285	\$ 1,145	\$ (860)	\$ 285
Europe	511	(330)	181	511	(330)	181
South America	291	(150)	141	291	(150)	141
	<u>\$ 1,947</u>	<u>\$ (1,340)</u>	<u>\$ 607</u>	<u>\$ 1,947</u>	<u>\$ (1,340)</u>	<u>\$ 607</u>

The components of “Intangible assets, net” are as follows (in millions).

	Weighted Average Life	March 31, 2019			March 31, 2018		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Tradenames	20 years	\$ 142	\$ (84)	\$ 58	\$ 142	\$ (77)	\$ 65
Technology and software	10.1 years	387	(276)	111	382	(246)	136
Customer-related intangible assets	20 years	447	(265)	182	456	(247)	209
	16.1 years	<u>\$ 976</u>	<u>\$ (625)</u>	<u>\$ 351</u>	<u>\$ 980</u>	<u>\$ (570)</u>	<u>\$ 410</u>

In the year ended March 31, 2019, we did not record any impairments. In the year ended March 31, 2018, we recorded impairment charges related to certain intangible software assets. All other intangible assets are amortized using the straight-line method. For additional information refer to Note 3 — Restructuring and Impairment.

Amortization expense related to “Intangible assets, net” is as follows (in millions).

	Year Ended March 31,		
	2019	2018	2017
Total amortization expense related to intangible assets	\$ 64	\$ 64	\$ 69
Less: Amortization expense related to intangible assets included in “Cost of goods sold (exclusive of depreciation and amortization)” (A)	—	—	(8)
Amortization expense related to intangible assets included in “Depreciation and amortization”	<u>\$ 64</u>	<u>\$ 64</u>	<u>\$ 61</u>

(A) Relates to amortization of favorable energy supply contract, which is fully amortized as of March 31, 2018.

Estimated total amortization expense related to “Intangible assets, net” for each of the five succeeding fiscal years is as follows (in millions). Actual amounts may differ from these estimates due to such factors as customer turnover, raw material consumption patterns, impairments, additional intangible asset acquisitions and other events.

<u>Fiscal Year Ending March 31,</u>	
2020	\$ 60
2021	\$ 57
2022	\$ 54
2023	\$ 45
2024	\$ 41

8. CONSOLIDATION

Variable Interest Entities (VIE)

The entity that has a controlling financial interest in a VIE is referred to as the primary beneficiary and consolidates the VIE. An entity is deemed to have a controlling financial interest and is the primary beneficiary of a VIE if it has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and an obligation to absorb losses or the right to receive benefits that could potentially be significant to the VIE.

Logan Aluminum Inc. (Logan) is a consolidated joint venture in which we hold 40% ownership. Our joint venture partner is Tri-Arrows Aluminum Inc. (Tri-Arrows). Logan processes metal received from Novelis and Tri-Arrows and charges the respective partner a fee to cover expenses. Logan is a thinly capitalized variable interest entity ("VIE") that relies on the regular reimbursement of costs and expenses from its investors, Novelis and Tri-Arrows, to fund its operations. Novelis is considered the primary beneficiary and consolidates Logan since it has the power to direct activities that most significantly impact Logan's economic performance, an obligation to absorb expected losses and the right to receive benefits that could potentially be significant.

Other than the contractually required reimbursements, we do not provide other material support to Logan. Logan's creditors do not have recourse to our general credit. There are significant other assets used in the operations of Logan that are not part of the joint venture, as they are directly owned and consolidated by Novelis or Tri-Arrows.

The following table summarizes the carrying value and classification of assets and liabilities owned by the Logan joint venture and consolidated in our consolidated balance sheets (in millions).

	March 31,	
	2019	2018
Assets		
Current assets		
Cash and cash equivalents	\$ 1	\$ —
Accounts receivable	40	39
Inventories	72	67
Prepaid expenses and other current assets	1	1
Total current assets	\$ 114	\$ 107
Property, plant and equipment, net	29	27
Goodwill	12	12
Deferred income taxes	64	67
Other long-term assets	27	26
Total assets	\$ 246	\$ 239
Liabilities		
Current liabilities		
Accounts payable	\$ 43	\$ 43
Accrued expenses and other current liabilities	21	22
Total current liabilities	\$ 64	\$ 65
Accrued postretirement benefits	245	245
Other long-term liabilities	1	1
Total liabilities	\$ 310	\$ 311

9. INVESTMENT IN AND ADVANCES TO NON-CONSOLIDATED AFFILIATES AND RELATED PARTY TRANSACTIONS

Included in the accompanying consolidated financial statements are transactions and balances arising from business we conducted with our equity method non-consolidated affiliates.

Alunorf

Aluminium Norf GmbH (Alunorf) is a joint venture investment between Novelis Deutschland GmbH, a subsidiary of Novelis, and Hydro Aluminum Deutschland GmbH (Hydro). Each of the parties to the joint venture holds a 50% interest in the equity, profits and losses, shareholder voting, management control and rights to use the production capacity of the facility. Alunorf tolls aluminum and charges the respective partner a fee to cover the associated expenses.

UAL

Ulsan Aluminum, Ltd. (UAL) is a joint venture investment between Novelis Korea Ltd., a subsidiary of Novelis, and Kobe. UAL is a thinly capitalized VIE that relies on the regular reimbursement of costs and expenses from its investors, Novelis and Kobe. UAL is controlled by an equally represented Board of Directors in which neither entity has sole decision-making ability regarding production operations or other significant decisions. Furthermore, neither entity has the ability to take the majority share of production or associated costs over the life of the joint venture. Our risk of loss is limited to the carrying value of our investment in and inventory-related receivables from UAL. UAL's creditors do not have recourse to our general credit. Therefore, UAL is accounted for as an equity method investment and Novelis is not considered the primary beneficiary. UAL currently produces flat rolled aluminum products exclusively for Novelis and Kobe. As of March 31, 2019, Novelis and Kobe both hold 50% interests in UAL.

AluInfra

In July 2018, Novelis Switzerland SA (Novelis Switzerland), a subsidiary of Novelis, entered into definitive agreements with Constellium, an unrelated party, under which Novelis Switzerland and Constellium jointly own and operate AluInfra Services SA (AluInfra), the joint venture investment. Each of the parties to the joint venture holds a 50% interest in the equity, profits and losses, shareholder voting, management control and rights to use the facility.

The following table summarizes the ownership structure and our ownership percentage of the non-consolidated affiliates in which we have investments in as of March 31, 2019 and 2018, and which we account for using the equity method.

Affiliate Name	Ownership Structure	Ownership Percentage
Aluminium Norf GmbH (Alunorf)	Corporation	50%
Ulsan Aluminum, Ltd. (UAL)	Corporation	50%
AluInfra Services SA (AluInfra)	Corporation	50%

The following table summarizes the assets, liabilities and equity of our equity method affiliates in the aggregate as of March 31, 2019 and 2018 (in millions).

	March 31,	
	2019	2018
Assets:		
Current assets	\$ 369	\$ 396
Non-current assets	835	944
Total assets	\$ 1,204	\$ 1,340
Liabilities:		
Current liabilities	\$ 234	\$ 281
Non-current liabilities	345	342
Total liabilities	\$ 579	\$ 623
Equity:		
Total equity	\$ 625	\$ 717
Total liabilities and equity	\$ 1,204	\$ 1,340

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

As of March 31, 2019, the investment in Alunorf exceeded our proportionate share of the net assets by \$430 million. The difference is primarily related to the unamortized fair value adjustments that are included in our investment balance as a result of the acquisition of Novelis by Hindalco in 2007.

As of March 31, 2019, the investment in UAL exceeded our proportionate share of the net assets by \$47 million. The difference primarily relates to goodwill.

The following table summarizes the results of operations of our equity method affiliates in the aggregate for the years ending March 31, 2019, 2018 and 2017; and the nature and amounts of significant transactions that we had with our non-consolidated affiliates (in millions). The amounts in the table below are disclosed at 100% of the operating results of these affiliates.

	Year Ended March 31,		
	2019	2018	2017
Net sales	\$ 1,245	\$ 866	\$ 447
Costs and expenses related to net sales	1,222	854	463
Provision (benefit) for taxes on income	7	3	(5)
Net income (loss)	\$ 16	\$ 9	\$ (11)
Purchase of tolling services from Alunorf	\$ 254	\$ 245	\$ 224

Related Party Transactions

Included in the accompanying consolidated financial statements are transactions and balances arising from business we conduct with our non-consolidated affiliates and our indirect parent company, Hindalco.

The following table describes the period-end account balances, shown as related party balances in the accompanying consolidated balance sheets (in millions). We had no other material related party balances with non-consolidated affiliates.

	March 31,	
	2019	2018
Accounts receivable-related parties	\$ 164	\$ 242
Other long-term assets-related parties	\$ —	\$ 3
Accounts payable-related parties	\$ 175	\$ 205

Transactions with Alunorf

We earned less than \$1 million of interest income on a loan due from Alunorf during each of the years presented in "Other long-term assets-related parties" in the table above. We believe collection of the full receivable from Alunorf is probable; thus no allowance for loan loss was provided for this loan as of March 31, 2019 and 2018.

We previously guaranteed the indebtedness for credit facilities and early retirement benefits on behalf of Alunorf. As of March 31, 2019, we no longer held guarantor responsibilities for either of these obligations.

Transactions with Hindalco

We occasionally have related party transactions with Hindalco. During the years ended March 31, 2019, 2018 and 2017, we recorded "Net sales" of less than \$1 million between Novelis and Hindalco related primarily to sales of equipment and other services. As of March 31, 2019 and 2018, there were less than \$1 million of "Accounts receivable, net - related parties" outstanding related to transactions with Hindalco. During the years ended March 31, 2019 and March 31, 2018, Novelis purchased less than \$1 million in raw materials from Hindalco.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

10. ACCRUED EXPENSES AND OTHER CURRENT LIABILITIES

“Accrued expenses and other current liabilities” consists of the following (in millions).

	March 31,	
	2019	2018
Accrued compensation and benefits	\$ 229	\$ 193
Accrued interest payable	44	44
Accrued income taxes	51	29
Other current liabilities	292	325
Accrued expenses and other current liabilities — third parties	<u>\$ 616</u>	<u>\$ 591</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

11. DEBT

Debt consists of the following (in millions).

	March 31, 2019				March 31, 2018			
	Interest Rates (A)	Principal	Unamortized Carrying Value Adjustments (B)	Carrying Value	Principal	Unamortized Carrying Value Adjustments (B)	Carrying Value	
Third party debt:								
Short term borrowings	4.28%	\$ 39	\$ —	\$ 39	\$ 49	\$ —	\$ 49	
Novelis Inc.								
Floating rate Term Loan Facility, due June 2022	4.45%	1,760	(33)	1,727	1,778	(43)	1,735	
Novelis Corporation								
5.875% Senior Notes, due September 2026	5.875%	1,500	(19)	1,481	1,500	(21)	1,479	
6.25% Senior Notes, due August 2024	6.25%	1,150	(14)	1,136	1,150	(17)	1,133	
Novelis Korea Limited								
Bank loans, due through September 2020 (KRW 1 billion)	1.75%	1	—	1	95	—	95	
Other								
Capital Lease Obligations and Other debt, due through December 2026	6.46%	2	—	2	15	—	15	
Total debt		\$ 4,452	\$ (66)	\$ 4,386	\$ 4,587	\$ (81)	\$ 4,506	
Less: Short term borrowings		(39)	—	(39)	(49)	—	(49)	
Current portion of long-term debt		(19)	—	(19)	(121)	—	(121)	
Long-term debt, net of current portion		\$ 4,394	\$ (66)	\$ 4,328	\$ 4,417	\$ (81)	\$ 4,336	

(A) Interest rates are the stated rates of interest on the debt instrument (not the effective interest rate) as of March 31, 2019, and therefore, exclude the effects of related interest rate swaps and accretion/amortization of fair value adjustments as a result of purchase accounting in connection with Hindalco's purchase of Novelis and accretion/amortization of debt issuance costs related to refinancing transactions and additional borrowings. We present stated rates of interest because they reflect the rate at which cash will be paid for future debt service.

(B) Amounts include unamortized debt issuance costs, fair value adjustments and debt discounts.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Principal repayment requirements for our total debt over the next five years and thereafter using exchange rates as of March 31, 2019 for our debt denominated in foreign currencies are as follows (in millions).

As of March 31, 2019	Amount
Short-term borrowings and current portion of long term debt due within one year	\$ 58
2 years	20
3 years	18
4 years	1,706
5 years	—
Thereafter	2,650
Total debt	\$ 4,452

Senior Secured Credit Facilities

As of March 31, 2019, the senior secured credit facilities consisted of (i) a \$1.8 billion five-year secured term loan credit facility (Term Loan Facility) and (ii) a \$1 billion asset based loan facility (ABL Revolver).

The senior secured credit facilities contain various affirmative covenants, including covenants with respect to our financial statements, litigation and other reporting requirements, insurance, payment of taxes, employee benefits and (subject to certain limitations) causing new subsidiaries to pledge collateral and guaranty our obligations. The senior secured credit facilities also include various customary negative covenants and events of default, including limitations on our ability to (1) incur additional indebtedness, (2) sell certain assets, (3) enter into sale and leaseback transactions, (4) make investments, loans and advances, (5) pay dividends or returns of capital and distributions beyond certain amounts, (6) engage in mergers, amalgamations or consolidations, (7) engage in certain transactions with affiliates, and (8) prepay certain indebtedness. The Term Loan Credit Agreement also contains a financial maintenance covenant that, prohibits Novelis' senior secured net leverage ratio as of the last day of each fiscal quarter period and measured on a rolling four quarter basis from exceeding 3.50 to 1.00, subject to customary equity cure rights. The senior secured credit facilities include a cross-default provision under which lenders could accelerate repayment of the loans if a payment or non-payment default arises under any other indebtedness with an aggregate principal amount of more than \$100 million (or, in the case of the Term Loan Facility, under the ABL Revolver regardless of the amount outstanding). Substantially all of our assets are pledged as collateral under the senior secured credit facilities.

Term Loan Facility

In the second quarter of fiscal 2019, we signed a definitive agreement to acquire Aleris, a global supplier of rolled aluminum products for \$2.6 billion, including the assumption of debt. In November 2018, we amended the existing Term Loan Facility to, among other things, allow the incurrence of the financing contemplated to close the proposed Aleris acquisition, which is subject to customary closing conditions and approvals. We also secured financing by entering into a commitment letter with certain financial institutions, which was subsequently superseded by the agreements detailed below.

In December 2018, we entered into an amendment (the "Term Loan Increase Joinder Amendment") to our existing Term Loan Facility, which provides for the commitments of certain financial institutions to provide, subject to customary closing conditions (including the concurrent closing of the Aleris acquisition), up to \$775 million of incremental term loans under our existing term loan credit agreement for purposes of funding a portion of the consideration payable in connection with the proposed Aleris acquisition. The incremental term loans, once borrowed, will be subject to the same voluntary and mandatory prepayment provisions, events of default and affirmative and negative covenants as the existing loans under the Term Loan Facility (as amended by the November 2018 amendments), will mature in five years from the borrowing date of the incremental loans), will be subject to 0.25% quarterly amortization payments and will accrue interest at LIBOR (as defined in the Term Loan Facility) plus 1.75%. The incremental term loans will be guaranteed by Novelis, AV Metals Inc., and certain other subsidiaries (including subsidiaries of Aleris following closing of the proposed acquisition) and secured on a pari passu basis with our existing term loans by security interests in substantially all of the assets of Novelis and the guarantors, subject to the existing intercreditor agreement.

The existing loans under our Term Loan Facility mature on June 2, 2022, and are subject to 0.25% quarterly amortization payments. The loans under the Term Loan Facility accrue interest at LIBOR plus 1.85%.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The existing Term Loan Facility requires customary mandatory prepayments with excess cash flow, asset sale and casualty event proceeds and proceeds of prohibited indebtedness, all subject to customary exceptions. The Term Loan may be prepaid, in full or in part, at any time at Novelis' election without penalty or premium. The Term Loan Facility allows for additional term loans to be issued in an amount not to exceed \$300 million (or its equivalent in other currencies) plus an unlimited amount if, after giving effect to such incurrences on a pro forma basis, the senior secured net leverage ratio does not exceed 3.00 to 1.00. The lenders under the Term Loan Facility have not committed to provide any such additional term loans.

As of March 31, 2019, we were in compliance with the covenants for our Term Loan Facility.

ABL Revolver

As of March 31, 2019, the facility was a \$1 billion senior secured revolver bearing an interest rate of LIBOR plus a spread of 1.25% to 1.75% or a prime rate plus a prime spread of 0.25% to 0.75% based on excess availability. The ABL Revolver had a provision that allowed the facility to be increased by an additional \$500 million, subject to lenders providing commitments for the increase. The ABL Revolver had various customary covenants including maintaining a specified minimum fixed charge coverage ratio of 1.25 to 1 if excess availability was less than the greater of (1) \$90 million and (2) 10% of the lesser of (a) the maximum size of the ABL Revolver and (b) the borrowing base. The ABL Revolver was scheduled to mature on September 14, 2022; provided that, in the event that the Term Loan Facility, or certain other indebtedness matured on or prior to March 14, 2023 and was outstanding 90 days prior to its maturity (and not refinanced with a maturity date later than March 14, 2023), then the ABL Revolver would mature 90 days prior to the maturity date for such other indebtedness, unless excess availability under the ABL Revolver was at least (i) 20% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base and (ii) 15% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base, and a minimum fixed charge ratio test of at least 1.25 to 1 was met.

As of March 31, 2019, we were in compliance with the covenants for our ABL Revolver.

ABL Revolver after April 15, 2019 Amendment

In April 2019, we amended and extended the ABL Revolver (the "Amendment"). The commitments under the \$1 billion facility will increase by \$500 million upon the earlier of the closing of our previously announced proposed acquisition of Aleris and October 15, 2019. Aleris and certain of its subsidiaries will become borrowers under the ABL Facility upon closing of the Acquisition, and the Amendment includes additional changes to facilitate the Acquisition (including permitting the borrowing of the Short Term Credit Agreement) and the inclusion of Aleris's assets in the borrowing base following the Acquisition.

The facility is a senior secured revolver bearing an interest rate of LIBOR plus a spread of 1.25% to 1.75% or a prime rate plus a prime spread of 0.25% to 0.75% based on excess availability. The ABL Revolver has a provision that allows the facility to be increased by an additional \$750 million, subject to lenders providing commitments for the increase. The ABL Revolver has various customary covenants including maintaining a specified minimum fixed charge coverage ratio of 1.25 to 1 if excess availability is less than the greater of (1) \$90 million and (2) 10% of the lesser of (a) the maximum size of the ABL Revolver and (b) the borrowing base. After the commitments under the facility increase to \$1.5 billion, a specified minimum fixed charge coverage ratio of 1.25 to 1 will be required if excess availability is less than the greater of (1) \$115 million and (2) 10% of the lesser of (a) the maximum size of the ABL Revolver and (b) the borrowing base. The ABL Revolver matures on April 15, 2024; provided that, (1) in the event that the Short Term Credit Agreement (as defined below) is outstanding (and not refinanced with a maturity date later than October 15, 2024) 60 days prior to its maturity then the ABL Revolver will mature 60 days prior to the maturity date of the Short Term Credit Agreement (provided further that if we have commenced a refinancing of the Short Term Credit Agreement that is continuing on and after the date that is 60 days prior to the maturity date of the Short Term Credit Agreement and that is scheduled to be and is capable of being completed prior to the date that is 45 days prior to the maturity date of the Short Term Credit Agreement, then the ABL Revolver will mature 45 days prior to the maturity date of the Short Term Credit Agreement); and (2) in the event that the Term Loan Facility or certain other indebtedness is outstanding 90 days prior to its maturity (and not refinanced with a maturity date later than October 15, 2024, then the ABL Revolver will mature 90 days prior to the maturity date for such other indebtedness, as applicable; unless excess availability under the ABL Revolver is at least (i) 20% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base and (ii) 15% of the lesser of (x) the total ABL Revolver commitment and (y) the then applicable borrowing base, and a minimum fixed charge ratio test of at least 1.25 to 1 is met. The Amendment also includes additional changes to increase our operating flexibility.

Short Term Credit Facility

In December 2018, we entered into a credit agreement (the “Short Term Credit Agreement”), which governs the commitments of certain financial institutions to provide, subject to customary closing conditions (including the concurrent closing of the Aleris acquisition and the amendment of our ABL Revolver) to, among other things, up to \$1.5 billion of short term loans for purposes of funding a portion of the consideration payable in connection with the proposed acquisition of Aleris or repaying certain indebtedness of Aleris and its subsidiaries. The short term loans, once borrowed, will be unsecured, will mature one year from the borrowing date of the loans, will not be subject to any amortization payments and will accrue interest at LIBOR (as defined in the Term Loan Facility) plus 0.95%. The short term loans will be guaranteed by the same entities that have provided guarantees under the Term Loan Facility and ABL Revolver.

The Short Term Credit Agreement contains voluntary prepayment provisions, affirmative and negative covenants and events of default substantially similar to those under the Term Loan Facility, as amended, other than changes to reflect the unsecured nature of the short term loans.

We will be required to apply the net cash proceeds we receive from any debt and equity raised on or after the borrowing date to repay the short term loans, subject to certain exceptions. We will be required to apply the net cash proceeds we receive on or after the borrowing date from asset sales required by regulatory approvals related to the proposed acquisition of Aleris to repay the short term loans, the incremental term loans and the existing term loans on a pro rata basis and the net cash proceeds we receive from any other asset sales, casualty losses, or condemnations on or after the borrowing date to repay short term loans, subject to certain exceptions, but only to the extent any funds remain after making any mandatory prepayments owed under the Term Loan Facility, as amended, and the agreement governing our ABL Revolver.

Senior Notes

On August 29, 2016, Novelis Corporation, an indirect wholly owned subsidiary of Novelis Inc., issued \$1.15 billion in aggregate principal amount of 6.25% Senior Notes Due 2024 (the 2024 Notes). The 2024 Notes are guaranteed, jointly and severally, on a senior unsecured basis, by Novelis Inc. and certain of its subsidiaries.

Additionally, on September 14, 2016, Novelis Corporation issued \$1.5 billion in aggregate principal amount of 5.875% Senior Notes Due 2026 (the 2026 Notes, and together with the 2024 Notes, the Notes). The 2026 Notes are guaranteed, jointly and severally, on a senior unsecured basis, by Novelis Inc. and certain of its subsidiaries.

The Notes contain customary covenants and events of default that will limit our ability and, in certain instances, the ability of certain of our subsidiaries to (1) incur additional debt and provide additional guarantees, (2) pay dividends or return capital beyond certain amounts and make other restricted payments, (3) create or permit certain liens, (4) make certain asset sales, (5) use the proceeds from the sales of assets and subsidiary stock, (6) create or permit restrictions on the ability of certain of Novelis' subsidiaries to pay dividends or make other distributions to Novelis, (7) engage in certain transactions with affiliates, (8) enter into sale and leaseback transactions, (9) designate subsidiaries as unrestricted subsidiaries and (10) consolidate, merge or transfer all or substantially all of our assets and the assets of certain of our subsidiaries. During any future period in which either Standard & Poor's Ratings Group, Inc. or Moody's Investors Service, Inc. have assigned an investment grade credit rating to the Notes and no default or event of default under the indenture has occurred and is continuing, most of the covenants will be suspended. The Notes include a cross-acceleration event of default triggered if (1) any other indebtedness with an aggregate principal amount of more than \$100 million is (1) accelerated prior to its maturity or (2) not repaid at its maturity. The Notes also contain customary call protection provisions for our bondholders that extend through August 2022 for the 2024 Notes and through September 2024 for the 2026 Notes. As of March 31, 2019, we were in compliance with the covenants for our Senior Notes.

Short Term Borrowings

As of March 31, 2019, our short-term borrowings totaled \$39 million consisting of \$38 million in China loans (CNY 258 million) and \$1 million in other short-term borrowings. \$8 million of the ABL was utilized for letters of credit and we had availability of \$787 million on the ABL Revolver, \$105 million in availability under our Novelis Korea revolving facilities and \$5 million in availability under our Novelis China revolving facilities.

12. SHARE-BASED COMPENSATION

The Company's board of directors has authorized long term incentive plans (LTIPs), under which Hindalco stock appreciation rights (Hindalco SARs), Novelis stock appreciation rights (Novelis SARs), phantom restricted stock units (RSUs), and Novelis Performance Units (Novelis PUs) are granted to certain executive officers and key employees.

The Hindalco SARs vest at the rate of 25% or 33% per year, subject to the achievement of an annual performance target. Fiscal 2012 through fiscal 2016 SARs expire in May of the seventh year from the original grant date, while Fiscal 2017 and onwards SARs expire seven years from their original grant date. The performance criterion for vesting of the Hindalco SARs is based on the actual overall Novelis operating EBITDA compared to the target established and approved each fiscal year. The minimum threshold for vesting each year is 75% of each annual target operating EBITDA. Given that the performance criterion is based on an earnings target in a future period for each fiscal year, the grant date of the awards for accounting purposes is generally not established until the performance criterion has been defined.

Each Hindalco SAR is to be settled in cash based on the difference between the market value of one Hindalco share on the date of grant and the market value on the date of exercise. Each Novelis SAR is to be settled in cash based on the difference between the fair value of one Novelis phantom share on the original date of grant and the fair value of a phantom share on the date of the exercise. The amount of cash paid to settle Hindalco SARs and Novelis SARs is limited to two and a half or three times the target payout, depending on the plan year. The Hindalco SARs and Novelis SARs do not transfer any shareholder rights in Hindalco or Novelis to a participant. The Hindalco SARs and Novelis SARs are classified as liability awards and are remeasured at fair value each reporting period until the SARs are settled.

In May 2016, the Company's board of directors approved the issuance of Novelis PUs which have a fixed \$100 value per unit and will vest in full three years from the grant date, subject to specific performance criteria compared to the established target. We made a voluntary offer to the participants with outstanding Novelis SARs granted for fiscal years 2012 through 2016 to exchange their Novelis SARs for an equivalently valued number of Novelis PUs. The voluntary exchange resulted in 1,054,662 Novelis SARs being modified into PUs which are not based on Novelis' nor Hindalco's fair values and are accounted for outside the scope of ASC 718, *Compensation - Stock Compensation*. This exchange was accounted for as a modification. There were 73,948 of Novelis SARs that remain outstanding as of March 31, 2019.

The RSUs are based on Hindalco's stock price. The RSUs vest either in full three years from the grant date or 33% per year over three years, subject to continued employment with the Company, but are not subject to performance criteria. Each RSU is to be settled in cash equal to the market value of one Hindalco share. The payout on the RSUs is limited to three times the market value of one Hindalco share measured on the original date of grant. The RSUs are classified as liability awards and expensed over the requisite service period (three years) based on the Hindalco stock price as of each balance sheet date.

Total compensation expense related to Hindalco SARs, Novelis SARs, and RSUs under the plans for the respective periods is presented in the table below (in millions). These amounts are included in "Selling, general and administrative expenses" in our consolidated statements of operations. As the performance criteria for fiscal years 2020, 2021, and 2022 have not yet been established, measurement periods for Hindalco SARs and Novelis SARs relating to those periods have not yet commenced. As a result, only compensation expense for vested and current year Hindalco SARs and Novelis SARs has been recorded.

	Year Ended March 31,		
	2019	2018	2017
Total compensation expense	\$ 17	\$ 21	\$ 21

The table below shows the RSUs activity for the year ended March 31, 2019.

	Number of RSUs	Grant Date Fair Value (in Indian Rupees)	Aggregate Intrinsic Value (USD in millions)
RSUs outstanding as of March 31, 2018	7,114,057	131.74	\$ 23
Granted	2,273,078	230.77	—
Exercised	(4,010,445)	129.09	15
Forfeited/Cancelled	(70,067)	164.32	—
RSUs outstanding as of March 31, 2019	5,306,623	179.27	\$ 16

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The table below shows Hindalco SARs activity for the year ended March 31, 2019.

	Number of Hindalco SARs	Weighted Average Exercise Price (in Indian Rupees)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (USD in millions)
SARs outstanding as of March 31, 2018	11,197,974	134.32	4.3	\$ 14
Granted	2,359,347	230.95	6.1	—
Exercised	(2,727,951)	123.80	0.0	5
Forfeited/Cancelled	(185,640)	137.96	0.0	—
SARs outstanding as of March 31, 2019	10,643,730	161.80	4.1	8
SARs exercisable as of March 31, 2019	4,244,193	141.77	2.9	\$ 5

The table below shows the Novelis SARs activity for the year ended March 31, 2019.

	Number of Novelis SARs	Weighted Average Exercise Price (in USD)	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (USD in millions)
SARs outstanding as of March 31, 2018	92,225	\$ 85.18	2.8	\$ —
Exercised	(5,458)	70.52	0.0	—
Forfeited/Cancelled	(12,819)	86.10	0.0	—
SARs outstanding as of March 31, 2019	73,948	86.10	1.9	—
SARs exercisable as of March 31, 2019	67,674	\$ 88.03	1.7	\$ —

The fair value of each unvested Hindalco SAR was estimated using the following assumptions:

	Year ended March 31,		
	2019	2018	2017
Risk-free interest rate	6.24% - 7.22%	6.14% - 7.67%	5.82% - 6.99%
Dividend yield	0.58%	0.53%	0.51%
Volatility	27% - 39%	29% - 42%	35% - 44%

The fair value of each unvested Novelis SAR was estimated using the following assumptions:

	Year ended March 31,		
	2019	2018	2017
Risk-free interest rate	2.19% - 2.46%	1.71% - 2.55%	0.78% - 1.95%
Dividend yield	—%	—%	—%
Volatility	17% - 25%	20% - 25%	25% - 28%

The fair value of each unvested Hindalco SAR was based on the difference between the fair value of a long call and a short call option. The fair value of each of these call options was determined using the Monte Carlo Simulation model. We used historical stock price volatility data of Hindalco on the National Stock Exchange of India to determine expected volatility assumptions. The risk-free interest rate is based on Indian treasury yields interpolated for a time period corresponding to the remaining contractual life. The forfeiture rate is estimated based on actual historical forfeitures. The dividend yield is estimated to be the annual dividend of the Hindalco stock over the remaining contractual lives of the Hindalco SARs. The value of each vested Hindalco SAR is remeasured at fair value each reporting period based on the excess of the current stock price over the exercise price, not to exceed the maximum payout as defined by the plans. The fair value of the Hindalco SARs is being recognized over the requisite performance and service period of each tranche, subject to the achievement of any performance criteria.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The fair value of each unvested Novelis SAR was based on the difference between the fair value of a long call and a short call option. The fair value of each of these call options was determined using the Monte Carlo Simulation model. We used the historical volatility of comparable companies to determine expected volatility assumptions. The risk-free interest rate is based on U.S. treasury yields for a time period corresponding to the remaining contractual life. The forfeiture rate is estimated based on actual historical forfeitures of Hindalco SARs. The value of each vested Novelis SAR is remeasured at fair value each reporting period based on the percentage increase in the current Novelis phantom stock price over the exercise price, not to exceed the maximum payout as defined by the plans. The fair value of the Novelis SARs is being recognized over the requisite performance and service period of each tranche, subject to the achievement of any performance criteria.

The cash payments made to settle Hindalco SAR liabilities were \$5 million, \$10 million, and \$7 million, in the years ended March 31, 2019, 2018, and 2017, respectively. The cash payments made to settle Novelis SAR liabilities were less than \$1 million in the years ended March 31, 2019, 2018 and 2017. Total cash payments made to settle Hindalco RSUs were \$15 million, \$8 million, and \$2 million in the years ended March 31, 2019, 2018 and 2017, respectively. Unrecognized compensation expense related to the non-vested Hindalco SARs (assuming all future performance criteria are met) was \$3 million that are expected to be recognized over a weighted average period of 1.2 years. Unrecognized compensation expense related to the non-vested Novelis SARs (assuming all future performance criteria are met) was less than \$1 million, that are expected to be recognized over a weighted average period of less than 1 year. Unrecognized compensation expense related to the RSUs was \$4 million, which will be recognized over the remaining weighted average vesting period of 1.4 years.

13. POSTRETIREMENT BENEFIT PLANS

Our pension obligations relate to: (1) funded defined benefit pension plans in the U.S., Canada, Switzerland, and the U.K.; (2) unfunded defined benefit pension plans in Germany; (3) unfunded lump sum indemnities payable upon retirement to employees in France and Italy; and (4) partially funded lump sum indemnities in South Korea. Our other postretirement obligations (Other Benefits, as shown in certain tables below) include unfunded health care and life insurance benefits provided to retired employees in the U.S., Canada, and Brazil. We have combined our domestic (i.e. Canadian Plans) and foreign (i.e. All other Plans other than Canadian Plans) postretirement benefit plan disclosures because our domestic benefit obligation is not significant as compared to our total benefit obligation, as our foreign benefit obligation is 95% of the total benefit obligation, and the assumptions used to value domestic and foreign plans were not significantly different. Fiscal 2018 settlement activity primarily relates to the formation of UAL.

Employer Contributions to Plans

For pension plans, our policy is to fund an amount required to provide for contractual benefits attributed to service to-date, and amortize unfunded actuarial liabilities typically over periods of 15 years or less. We also participate in savings plans in Canada and the U.S., as well as defined contribution pension plans in the U.S., U.K., Canada, Germany, Italy, Switzerland and Brazil. We contributed the following amounts (in millions) to all plans.

	Year Ended March 31,		
	2019	2018	2017
Funded pension plans	\$ 35	\$ 57	\$ 26
Unfunded pension plans	12	12	15
Savings and defined contribution pension plans	31	27	25
Total contributions	<u>\$ 78</u>	<u>\$ 96</u>	<u>\$ 66</u>

During fiscal year 2020, we expect to contribute \$51 million to our funded pension plans, \$12 million to our unfunded pension plans and \$34 million to our savings and defined contribution pension plans.

Benefit Obligations, Fair Value of Plan Assets, Funded Status and Amounts Recognized in Financial Statements

The following tables present the change in benefit obligation, change in fair value of plan assets and the funded status for pension and other benefits (in millions).

	Pension Benefits		Other Benefits	
	Year Ended March 31,		Year Ended March 31,	
	2019	2018	2019	2018
Benefit obligation at beginning of period	\$ 1,983	\$ 1,865	\$ 176	\$ 153
Service cost	39	44	9	7
Interest cost	60	60	7	7
Members' contributions	4	5	—	—
Benefits paid	(70)	(60)	(7)	(8)
Amendments	3	(8)	—	3
Curtailments, settlements and special termination benefits	—	(25)	—	—
Actuarial losses (gains)	36	17	(14)	14
Other	(3)	(3)	—	—
Currency losses (gains)	(65)	88	—	—
Benefit obligation at end of period	<u>\$ 1,987</u>	<u>\$ 1,983</u>	<u>\$ 171</u>	<u>\$ 176</u>
Benefit obligation of funded plans	1,686	1,677	—	—
Benefit obligation of unfunded plans	301	306	171	176
Benefit obligation at end of period	<u>\$ 1,987</u>	<u>\$ 1,983</u>	<u>\$ 171</u>	<u>\$ 176</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	Pension Benefits	
	Year Ended March 31,	
	2019	2018
Change in fair value of plan assets		
Fair value of plan assets at beginning of period	\$ 1,317	\$ 1,200
Actual return on plan assets	40	85
Members' contributions	4	5
Benefits paid	(70)	(60)
Company contributions	47	69
Settlements	—	(24)
Other	(3)	(3)
Currency (losses) gains	(35)	45
Fair value of plan assets at end of period	\$ 1,300	\$ 1,317

	March 31,			
	2019		2018	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Funded status				
Funded status at end of period:				
Assets less the benefit obligation of funded plans	\$ (386)	\$ —	\$ (360)	\$ —
Benefit obligation of unfunded plans	(301)	(171)	(306)	(176)
	<u>\$ (687)</u>	<u>\$ (171)</u>	<u>\$ (666)</u>	<u>\$ (176)</u>
As included in our consolidated balance sheets within Total assets / (Total liabilities)				
Other noncurrent assets	\$ 5	\$ —	\$ 3	\$ —
Accrued expenses and other current liabilities	(12)	(7)	(13)	(6)
Accrued postretirement benefits	(680)	(164)	(656)	(169)
	<u>\$ (687)</u>	<u>\$ (171)</u>	<u>\$ (666)</u>	<u>\$ (175)</u>

The postretirement amounts recognized in "Accumulated other comprehensive loss," before tax effects, are presented in the table below (in millions), and includes the impact related to our equity method investments. Amounts are amortized to net periodic benefit cost over the group's average future service life of the employees or the group's average life expectancy.

	March 31,			
	2019		2018	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Net actuarial losses	\$ (377)	\$ (13)	\$ (355)	\$ (29)
Prior service credit	10	5	13	5
Total postretirement amounts recognized in Accumulated other comprehensive income	<u>\$ (367)</u>	<u>\$ (8)</u>	<u>\$ (342)</u>	<u>\$ (24)</u>

The estimated amounts that will be amortized from "Accumulated other comprehensive loss" into net periodic benefit costs in fiscal year 2020 (exclusive of equity method investments) are \$35 million for pension benefit costs related to net actuarial losses of \$36 million partially offset by prior service credits of \$1 million, and \$1 million for other postretirement benefits, primarily related to amortization of actuarial losses of \$1 million.

The postretirement changes recognized in "Accumulated other comprehensive loss," before tax effects, are presented in the table below (in millions), and include the impact related to our equity method investments.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

	March 31,			
	2019		2018	
	Pension Benefits	Other Benefits	Pension Benefits	Other Benefits
Beginning balance in Accumulated other comprehensive loss	\$ (342)	\$ (24)	\$ (371)	\$ (9)
Curtailments, settlements, and special termination benefits	2	—	1	—
Plan amendment	—	—	—	(3)
Net actuarial (loss) gain	(75)	14	7	(15)
Prior service cost	(3)	—	8	—
Amortization of:				
Prior service credits	(1)	—	(1)	1
Actuarial losses	35	2	40	2
Effect of currency exchange	17	—	(26)	—
Total postretirement amounts recognized in Accumulated other comprehensive income	<u>\$ (367)</u>	<u>\$ (8)</u>	<u>\$ (342)</u>	<u>\$ (24)</u>

Pension Plan Obligations

The projected benefit obligation, accumulated benefit obligation and fair value of plan assets are presented in the table below (in millions).

	March 31,	
	2019	2018
The projected benefit obligation and accumulated benefit obligation for all defined benefit pension plans:		
Projected benefit obligation	\$ 1,987	\$ 1,983
Accumulated benefit obligation	\$ 1,835	\$ 1,830
Pension plans with projected benefit obligations in excess of plan assets:		
Projected benefit obligation	\$ 1,886	\$ 1,880
Fair value of plan assets	\$ 1,195	\$ 1,211
Pension plans with accumulated benefit obligations in excess of plan assets:		
Accumulated benefit obligation	\$ 1,705	\$ 1,702
Fair value of plan assets	\$ 1,153	\$ 1,171
Pension plans with projected benefit obligations less than plan assets:		
Projected benefit obligation	\$ 101	\$ 103
Fair value of plan assets	\$ 105	\$ 106

Future Benefit Payments

Expected benefit payments to be made during the next ten fiscal years are listed in the table below (in millions).

	Pension Benefits	Other Benefits
2020	\$ 77	\$ 7
2021	83	8
2022	86	8
2023	89	9
2024	95	10
2025 through 2029	528	55
Total	<u>\$ 958</u>	<u>\$ 97</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Components of Net Periodic Benefit Cost

The components of net periodic benefit cost for the respective periods are listed in the table below (in millions).

	Pension Benefits			Other Benefits		
	Year Ended March 31,			Year Ended March 31,		
	2019	2018	2017	2019	2018	2017
Net periodic benefit costs						
Service cost	\$ 39	\$ 44	\$ 45	\$ 9	\$ 7	\$ 6
Interest cost	60	60	59	7	7	6
Expected return on assets	(66)	(63)	(61)	—	—	—
Amortization — losses	32	36	40	2	1	4
Amortization — prior service credit	(1)	(1)	(2)	—	—	2
Curtailment, settlement, and special termination losses	2	2	1	—	—	—
Net periodic benefit cost	\$ 66	\$ 78	\$ 82	\$ 18	\$ 15	\$ 18
Proportionate share of non-consolidated affiliates' pension costs	10	9	8	—	—	—
Total net periodic benefit costs recognized	\$ 76	\$ 87	\$ 90	\$ 18	\$ 15	\$ 18

Actuarial Assumptions and Sensitivity Analysis

The weighted average assumptions used to determine benefit obligations and net periodic benefit costs for the respective periods are listed in the table below.

	Pension Benefits			Other Benefits		
	Year Ended March 31,			Year Ended March 31,		
	2019	2018	2017	2019	2018	2017
Weighted average assumptions used to determine benefit obligations						
Discount rate	3.0%	3.1%	3.2%	4.0%	4.0%	4.1%
Average compensation growth	3.2%	3.1%	3.1%	3.5%	3.5%	3.5%
Weighted average assumptions used to determine net periodic benefit cost						
Discount rate	3.1%	3.2%	3.3%	4.0%	4.1%	4.0%
Average compensation growth	3.1%	3.1%	3.1%	3.5%	3.5%	3.5%
Expected return on plan assets	5.2%	5.2%	5.4%	—%	—%	—%

In selecting the appropriate discount rate for each plan, for pension and other postretirement plans in Canada, the U.S., U.K., and other Euro zone countries, we used spot rate yield curves and individual bond matching models. For other countries, we used published long-term high quality corporate bond indices with adjustments made to the index rates based on the duration of the plans' obligation.

In estimating the expected return on assets of a pension plan, consideration is given primarily to its target allocation, the current yield on long-term bonds in the country where the plan is established, and the historical risk premium of equity or real estate over long-term bond yields in each relevant country. The approach is consistent with the principle that assets with higher risk provide a greater return over the long-term. The expected long-term rate of return on plan assets is 5.2% in fiscal 2020.

We provide unfunded health care and life insurance benefits to our retired employees in Canada, the U.S. and Brazil, for which we paid \$7 million, \$8 million, and \$8 million in fiscal 2019, 2018 and 2017, respectively. The assumed health care cost trend used for measurement purposes is 7.3% for fiscal 2020, decreasing gradually to 5% in 2028 and remaining at that level thereafter.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

A change of one percentage point in the assumed health care cost trend rates would have the following effects on our other benefits (in millions).

	1% Increase		1% Decrease	
Sensitivity Analysis				
Effect on service and interest costs	\$	3	\$	(2)
Effect on benefit obligation	\$	17	\$	(14)

In addition, we provide post-employment benefits, including disability, early retirement and continuation of benefits (medical, dental, and life insurance) to our former or inactive employees, which are accounted for on the accrual basis in accordance with ASC 712, *Compensation — Retirement Benefits*. "Other long-term liabilities" and "Accrued expenses and other current liabilities" on our consolidated balance sheets include \$11 million and \$4 million, respectively, as of March 31, 2019, for these benefits. Comparatively, "Other long-term liabilities" and "Accrued expenses and other current liabilities" on our consolidated balance sheets include \$10 million and \$4 million, respectively, as of March 31, 2018.

Investment Policy and Asset Allocation

The Company's overall investment strategy is to achieve a mix of approximately 50% of investments for long-term growth (equities, real estate) and 50% for near-term benefit payments (debt securities, other) with a wide diversification of asset categories, investment styles, fund strategies and fund managers. Since most of the defined benefit plans are closed to new entrants, we expect this strategy to gradually shift more investments toward near-term benefit payments.

Each of our funded pension plans is governed by an Investment Fiduciary, who establishes an investment policy appropriate for the pension plan. The Investment Fiduciary is responsible for selecting the asset allocation for each plan, monitoring investment managers, monitoring returns versus benchmarks and monitoring compliance with the investment policy. The targeted allocation ranges by asset class, and the actual allocation percentages for each class are listed in the table below.

Asset Category	Target Allocation	Ranges	Allocation in Aggregate as of March 31,	
			2019	2018
Equity		14-48%	33%	33%
Fixed income		42-76%	52%	55%
Real estate		0-15%	2%	3%
Other		0-21%	13%	9%

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Fair Value of Plan Assets

The following pension plan assets are measured and recognized at fair value on a recurring basis (in millions). Please see Note 17 — Fair Value Measurements for a description of the fair value hierarchy. The U.S. and Canadian pension plan assets are invested exclusively in commingled funds and classified in Level 2, and the U.K., Switzerland, and South Korea pension plan assets are invested in both direct investments (Levels 1 and 2) and commingled funds (Level 2).

Pension Plan Assets

	March 31, 2019				March 31, 2018			
	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3	Total
Equity	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Fixed income	138	42	—	180	163	41	—	204
Real estate	—	—	—	—	—	—	—	—
Cash and cash equivalents	12	—	—	12	7	—	—	7
Other	—	—	—	—	—	—	—	—
Investments measured at net asset value (A)	—	—	—	1,108	—	—	—	1,106
Total	\$ 150	\$ 42	\$ —	\$ 1,300	\$ 170	\$ 41	\$ —	\$ 1,317

(A) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been categorized in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the statement of financial position.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

14. CURRENCY LOSSES (GAINS)

The following currency losses (gains) are included in "Other expenses, net" in the accompanying consolidated statements of operations (in millions).

	Year Ended March 31,		
	2019	2018	2017
(Gain) loss on remeasurement of monetary assets and liabilities, net	\$ (5)	\$ (46)	\$ 30
Loss (gain) recognized on balance sheet remeasurement currency exchange contracts, net	6	47	(35)
Currency losses (gains), net	<u>\$ 1</u>	<u>\$ 1</u>	<u>\$ (5)</u>

The following currency losses are included in "Accumulated other comprehensive loss, net of tax" and "Noncontrolling interests" in the accompanying consolidated balance sheets (in millions).

	Year Ended March 31,		
	2019	2018	2017
Cumulative currency translation adjustment — beginning of period	\$ (65)	\$ (256)	\$ (197)
Effect of changes in exchange rates	(171)	191	(75)
Sale of investment in foreign entities (A)	—	—	16
Cumulative currency translation adjustment — end of period	<u>\$ (236)</u>	<u>\$ (65)</u>	<u>\$ (256)</u>

(A) We reclassified \$16 million of cumulative currency losses from AOCI to "(Gain) loss on sale of a business, net" during the year-ended March 31, 2017 due to the sale of our equity interest in Aluminium Company of Malaysia Berhad.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

15. FINANCIAL INSTRUMENTS AND COMMODITY CONTRACTS

The following tables summarize the gross fair values of our financial instruments and commodity contracts as of March 31, 2019 and 2018 (in millions):

	March 31, 2019				
	Assets		Liabilities		Net Fair Value
	Current	Noncurrent (A)	Current	Noncurrent (A)	Assets/(Liabilities)
Derivatives designated as hedging instruments:					
<i>Cash flow hedges</i>					
Metal contracts	\$ 6	\$ —	\$ (10)	\$ —	\$ (4)
Currency exchange contracts	4	—	(15)	(1)	(12)
Energy contracts	—	—	(1)	(4)	(5)
Total derivatives designated as hedging instruments	\$ 10	\$ —	\$ (26)	\$ (5)	\$ (21)
Derivatives not designated as hedging instruments					
Metal contracts	38	1	(34)	(1)	4
Currency exchange contracts	22	1	(27)	(1)	(5)
Total derivatives not designated as hedging instruments	\$ 60	\$ 2	\$ (61)	\$ (2)	\$ (1)
Total derivative fair value	\$ 70	\$ 2	\$ (87)	\$ (7)	\$ (22)

	March 31, 2018				
	Assets		Liabilities		Net Fair Value
	Current	Noncurrent (A)	Current	Noncurrent (A)	Assets/(Liabilities)
Derivatives designated as hedging instruments:					
<i>Cash flow hedges</i>					
Metal contracts	\$ 63	\$ 1	\$ (1)	\$ —	\$ 63
Currency exchange contracts	5	—	(7)	—	(2)
Energy contracts	—	1	(2)	(7)	(8)
Total derivatives designated as hedging instruments	\$ 68	\$ 2	\$ (10)	\$ (7)	\$ 53
Derivatives not designated as hedging instruments					
Metal contracts	75	—	(64)	—	11
Currency exchange contracts	15	—	(32)	(1)	(18)
Energy contracts	1	—	—	—	1
Total derivatives not designated as hedging instruments	\$ 91	\$ —	\$ (96)	\$ (1)	\$ (6)
Total derivative fair value	\$ 159	\$ 2	\$ (106)	\$ (8)	\$ 47

(A) The noncurrent portions of derivative assets and liabilities are included in “Other long-term assets-third parties” and in “Other long-term liabilities”, respectively, in the accompanying consolidated balance sheets.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Metal

We use derivative instruments to preserve our conversion margins and manage the timing differences associated with metal price lag. We use over-the-counter derivatives indexed to the LME (referred to as our "aluminum derivative forward contracts") to reduce our exposure to fluctuating metal prices associated with the period of time between the pricing of our purchases of inventory and the pricing of the sale of that inventory to our customers, which is known as "metal price lag." We also purchase forward LME aluminum contracts simultaneously with our sales contracts with customers that contain fixed metal prices. These LME aluminum forward contracts directly hedge the economic risk of future metal price fluctuations to better match the selling price of the metal with the purchase price of the metal. The volatility in local market premiums also results in metal price lag.

Price risk exposure arises from commitments to sell aluminum in future periods at fixed prices. We identify and designate certain LME aluminum forward contracts as fair value hedges of the metal price risk associated with fixed price sales commitments that qualify as firm commitments. We did not have any outstanding aluminum forward purchase contracts designated as fair value hedges as of March 31, 2019 and March 31, 2018.

Price risk arises due to fluctuating aluminum prices between the time the sales order is committed and the time the order is shipped. We identify and designate certain LME aluminum forward purchase contracts as cash flow hedges of the metal price risk associated with our future metal purchases that vary based on changes in the price of aluminum. We did not have any outstanding aluminum forward purchase contracts designated as cash flow hedges as of March 31, 2019 and March 31, 2018.

Price risk exposure arises due to the timing lag between the LME based pricing of raw material aluminum purchases and the LME based pricing of finished product sales. We identify and designate certain LME aluminum forward sales contracts as cash flow hedges of the metal price risk associated with our future metal sales that vary based on changes in the price of aluminum. Generally, such exposures do not extend beyond two years in length. The average duration of undesignated contracts is less than one year.

In addition to aluminum, in the first quarter of fiscal year 2019, we entered into LME copper and LMP forward contracts. As of March 31, 2019, the fair value of these contracts was an asset of less than \$1 million. These contracts are undesignated with an average duration of less than one year.

The following table summarizes our notional amount (in kt).

	March 31,	
	2019	2018
Hedge type		
<i>Purchase (sale)</i>		
Cash flow sales	(353)	(423)
Not designated	15	(74)
Total, net	(338)	(497)

Foreign Currency

We use foreign exchange forward contracts, cross-currency swaps and options to manage our exposure to changes in exchange rates. These exposures arise from recorded assets and liabilities, firm commitments and forecasted cash flows denominated in currencies other than the functional currency of certain operations.

We use foreign currency contracts to hedge expected future foreign currency transactions, which include capital expenditures. These contracts cover the same periods as known or expected exposures. We had total notional amounts of \$703 million and \$499 million in outstanding foreign currency forwards designated as cash flow hedges as of March 31, 2019 and 2018, respectively.

We use foreign currency contracts to hedge our foreign currency exposure to our net investment in foreign subsidiaries. We did not have any outstanding foreign currency forwards designated as net investment hedges as of March 31, 2019 and March 31, 2018.

As of March 31, 2019 and 2018, we had outstanding foreign currency exchange contracts with a total notional amount of \$737 million and \$1,024 million, respectively, to primarily hedge balance sheet remeasurement risk, which were not designated as hedges. Contracts representing the majority of this notional amount will mature during the first quarter of fiscal 2020 and offset the remeasurement impact.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Energy

We owned an interest in an electricity swap that matured January 5, 2017, which we formerly designated as a cash flow hedge of our exposure to fluctuating electricity prices. As of March 31, 2011, due to significant credit deterioration of our counterparty, we discontinued hedge accounting for this electricity swap. We did not have any outstanding notional megawatt hours remaining as of March 31, 2018 or March 31, 2019.

On December 31, 2015, we entered into an agreement to extend the electricity swap contract for an additional five years, effective January 6, 2017 and maturing on January 5, 2022. As of March 31, 2019 and 2018, 1 million of notional megawatt hours was outstanding and the fair value of this swap was a liability of \$3 million and \$7 million, respectively. The electricity swap is designated as a cash flow hedge.

We use natural gas forward purchase contracts to manage our exposure to fluctuating energy prices in North America. We had a notional of 15 million MMBTU designated as cash flow hedges as of March 31, 2019, and the fair value was a liability of \$2 million. There was a notional of 20 million MMBTU of natural gas forward purchase contracts designated as cash flow hedges as of March 31, 2018 and the fair value was a liability of \$1 million. As of March 31, 2019 and 2018, we had notionals of less than 1 million MMBTU of forward contracts that were not designated as hedges. The fair value of forward contracts not designated as hedges as of March 31, 2019 and 2018 were both a liability of less than \$1 million. The average duration of undesignated contracts is less than two years in length. One MMBTU is the equivalent of one decatherm, or one million British Thermal Units.

We use diesel fuel forward purchase contracts to manage our exposure to fluctuating fuel prices in North America. In the fourth quarter of fiscal year 2019, we designated 8 million gallons as cash flow hedges as of March 31, 2019, and the fair value was a liability of less than \$1 million. As of March 31, 2018, we had 5 million gallons of diesel fuel forward purchase contracts outstanding, which were not designated as hedges. The fair value as of March 31, 2018 was an asset of \$2 million.

Interest Rate

As of March 31, 2019, we had no outstanding interest rate swaps, as all swaps expired concurrent with the maturity of the related loans. As of March 31, 2018 \$28 million (KRW 30 billion) of interest rate swaps were designated as cash flow hedges.

Gain (Loss) Recognition

The following table summarizes the gains (losses) associated with the change in fair value of derivative instruments not designated as hedges and the ineffectiveness and excluded portion of designated derivatives recognized in "Other expenses, net" (in millions). Gains (losses) recognized in other line items in the consolidated statement of operations are separately disclosed within this footnote.

	Year Ended March 31,		
	2019	2018	2017
Derivative instruments not designated as hedges			
Metal contracts	\$ (8)	\$ 10	\$ (44)
Currency exchange contracts	(4)	(57)	40
Energy contracts (A)	6	7	8
(Loss) gain recognized in "Other expense, net"	\$ (6)	\$ (40)	\$ 4
Derivative instruments designated as hedges			
(Loss) gain recognized in "Other expense, net" (B)	2	(7)	(25)
Total (loss) gain recognized in "Other expense, net"	<u>\$ (4)</u>	<u>\$ (47)</u>	<u>\$ (21)</u>
Balance sheet remeasurement currency exchange contract (losses) gains	(6)	(47)	35
Realized (losses) gains, net	12	(20)	(61)
Unrealized gains (losses) on other derivative instruments, net	(10)	20	5
Total (loss) gain recognized in "Other expense, net"	<u>\$ (4)</u>	<u>\$ (47)</u>	<u>\$ (21)</u>

(A) Includes amounts related to de-designated electricity swap and natural gas and diesel fuel swaps not designated as hedges.

(B) Amount includes: forward market premium/discount excluded from hedging relationship and ineffectiveness on designated aluminum contracts; releases to income from AOCI on balance sheet remeasurement contracts; and ineffectiveness of fair value hedges involving aluminum derivatives.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes the impact on AOCI and earnings of derivative instruments designated as cash flow and net investment hedges (in millions). Within the next twelve months, we expect to reclassify \$1 million of losses from AOCI to earnings, before taxes.

	Amount of Gain (Loss) Recognized in OCI (Effective Portion)			Amount of Gain (Loss) Recognized in "Other (Income) Expense, net" (Ineffective and Excluded Portion)		
	Year Ended March 31,			Year Ended March 31,		
	2019	2018	2017	2019	2018	2017
Cash flow hedging derivatives						
Metal contracts	\$ 33	\$ 35	\$ (137)	\$ —	\$ (9)	\$ (27)
Currency exchange contracts	(44)	(5)	48	2	1	2
Energy contracts	3	(4)	(7)	—	1	(1)
Total cash flow hedging derivatives	\$ (8)	\$ 26	\$ (96)	\$ 2	\$ (7)	\$ (26)
Net investment derivatives						
Currency exchange contracts	—	(17)	—	—	—	—
Total	\$ (8)	\$ 9	\$ (96)	\$ 2	\$ (7)	\$ (26)

Gain (Loss) Reclassification

	Amount of Gain (Loss) Reclassified from AOCI into Income/(Expense) (Effective Portion) Year Ended March 31,			Location of Gain (Loss) Reclassified from AOCI into Earnings
	2019	2018	2017	
Cash flow hedging derivatives				
Energy contracts (A)	\$ —	\$ —	\$ (4)	Other expenses, net
Energy contracts (C)	(1)	(3)	(4)	Cost of goods sold (B)
Metal contracts (D)	—	(78)	(55)	Cost of goods sold (B)
Metal contracts (D)	89	(22)	(3)	Net sales
Currency exchange contracts	(14)	14	18	Cost of goods sold (B)
Currency exchange contracts	(1)	1	2	Selling, general and administrative expenses
Currency exchange contracts	(9)	7	7	Net sales
Currency exchange contracts	(1)	(1)	(1)	Depreciation and amortization
Total	\$ 63	\$ (82)	\$ (40)	Income (loss) before income taxes
	(17)	24	12	Income tax (provision) benefit
	\$ 46	\$ (58)	\$ (28)	Net income (loss)

(A) Includes amounts related to de-designated electricity swap. AOCI related to this swap was amortized to income over the remaining term of the hedged item.

(B) "Cost of goods sold" is exclusive of depreciation and amortization.

(C) Includes amounts related to electricity, natural gas, and diesel swaps.

(D) Effective with the adoption of ASU 2017-12, *Derivatives and Hedging (Topic 815): Target Improvements to Accounting for Hedging Activities* in the fourth quarter of fiscal year 2018, releases from AOCI for aluminum contracts are recorded to Net sales.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table summarizes the location and amount of gain (loss) that was reclassified from "Accumulated other comprehensive loss" into earnings and the amount excluded from the assessment of effectiveness for the three and twelve months ended March 31, 2019 (in millions).

	Three Months Ended March 31, 2019				
	Net Sales	Cost of Goods Sold	Selling, General and Administrative Expenses	Depreciation and Amortization	Other expense (income), net
Gain (loss) on cash flow hedging relationships:					
Metal commodity contracts:					
Amount of loss reclassified from AOCI into income	\$ 47	\$ —	\$ —	\$ —	\$ —
Energy commodity contracts:					
Amount of loss reclassified from AOCI into income	\$ —	\$ 1	\$ —	\$ —	\$ —
Foreign exchange contracts:					
Amount of gain reclassified from AOCI into income	\$ (3)	\$ (4)	\$ —	\$ —	\$ —
Amount excluded from effectiveness testing recognized in earnings based on changes in fair value	\$ —	\$ —	\$ —	\$ —	\$ —

	Year Ended March 31, 2019				
	Net Sales	Cost of Goods Sold	Selling, General and Administrative Expenses	Depreciation and Amortization	Other expenses, net
Gain (loss) on cash flow hedging relationships					
Metal commodity contracts:					
Amount of gain reclassified from AOCI into income	\$ 89	\$ —	\$ —	\$ —	\$ —
Energy commodity contracts:					
Amount of loss reclassified from AOCI into income	\$ —	\$ (1)	\$ —	\$ —	\$ —
Foreign exchange contracts:					
Amount of loss reclassified from AOCI into income	\$ (9)	\$ (14)	\$ (1)	\$ (1)	\$ —
Amount excluded from effectiveness testing recognized in earnings based on changes in fair value	\$ —	\$ —	\$ —	\$ —	\$ 2

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

16. ACCUMULATED OTHER COMPREHENSIVE LOSS

The following table summarizes the change in the components of "Accumulated other comprehensive loss, net of tax" and excluding "Noncontrolling interests", for the periods presented (in millions).

	Currency Translation	(B) Cash Flow Hedges	(C) Postretirement Benefit Plans	Total
Balance as of March 31, 2016	\$ (196)	\$ (11)	\$ (293)	\$ (500)
Other comprehensive (loss) income before reclassifications	(76)	(63)	22	(117)
Amounts reclassified from AOCI, net (A)	16	28	28	72
Net current-period other comprehensive (loss) income	(60)	(35)	50	(45)
Balance as of March 31, 2017	\$ (256)	\$ (46)	\$ (243)	\$ (545)
Other comprehensive income before reclassifications	191	19	29	239
Amounts reclassified from AOCI, net	—	58	(13)	45
Net current-period other comprehensive income	191	77	16	284
Balance as of March 31, 2018	\$ (65)	\$ 31	\$ (227)	\$ (261)
Amounts reclassified from AOCI, net - due to adoption of accounting standard updates	—	(3)	(13)	(16)
Balance as of April 1, 2018	\$ (65)	\$ 28	\$ (240)	\$ (277)
Other comprehensive loss before reclassifications	(171)	(4)	(33)	(208)
Amounts reclassified from AOCI, net	—	(46)	25	(21)
Net current-period other comprehensive income	(171)	(50)	(8)	(229)
Balance as of March 31, 2019	\$ (236)	\$ (22)	\$ (248)	\$ (506)

(A) The \$16 million in currency translation reclassified from AOCI relates to CTA that was written off as part of our sale of the Aluminium Company of Malaysia Berhad (ALCOM) business. Refer to Note 18 — Other Expenses for additional information.

(B) For additional information on our cash flow hedges see Note 15 — Financial Instruments and Commodity Contracts.

(C) For additional information on our postretirement benefit plans see Note 13 — Postretirement Benefit Plans.

17. FAIR VALUE MEASUREMENTS

We record certain assets and liabilities, primarily derivative instruments, on our consolidated balance sheets at fair value. We also disclose the fair values of certain financial instruments, including debt and loans receivable, which are not recorded at fair value. Our objective in measuring fair value is to estimate an exit price in an orderly transaction between market participants on the measurement date. We consider factors such as liquidity, bid/offer spreads and nonperformance risk, including our own nonperformance risk, in measuring fair value. We use observable market inputs wherever possible. To the extent observable market inputs are not available, our fair value measurements will reflect the assumptions we used. We grade the level of the inputs and assumptions used according to a three-tier hierarchy:

Level 1 — Unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities we have the ability to access at the measurement date.

Level 2 — Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 — Unobservable inputs for which there is little or no market data, which require us to develop our own assumptions based on the best information available as what market participants would use in pricing the asset or liability.

The following section describes the valuation methodologies we used to measure our various financial instruments at fair value, including an indication of the level in the fair value hierarchy in which each instrument is generally classified.

Derivative Contracts

For certain derivative contracts with fair values based upon trades in liquid markets, such as aluminum, foreign exchange, natural gas and diesel fuel forward contracts and options, valuation model inputs can generally be verified and valuation techniques do not involve significant judgment. The fair values of such financial instruments are generally classified within Level 2 of the fair value hierarchy.

The majority of our derivative contracts are valued using industry-standard models with observable market inputs as their basis, such as time value, forward interest rates, volatility factors, and current (spot) and forward market prices. We generally classify these instruments within Level 2 of the valuation hierarchy. Such derivatives include interest rate swaps, cross-currency swaps, foreign currency contracts, aluminum and copper forward contracts, natural gas and diesel fuel forward contracts.

We classify derivative contracts that are valued based on models with significant unobservable market inputs as Level 3 of the valuation hierarchy. Our electricity swap, which is our only Level 3 derivative contract, represents an agreement to buy electricity at a fixed price at our Oswego, New York facility. Forward prices are not observable for this market, so we must make certain assumptions based on available information we believe to be relevant to market participants. We use observable forward prices for a geographically nearby market and adjust for 1) historical spreads between the cash prices of the two markets, and 2) historical spreads between retail and wholesale prices.

For the electricity swap, the average forward price at March 31, 2019, estimated using the method described above, was \$43 per megawatt hour, which represented an approximately \$2 premium over forward prices in the nearby observable market. The actual rate from the most recent swap settlement was approximately \$41 per megawatt hour. Each \$1 per megawatt hour decline in price decreases the valuation of the electricity swap by \$1 million.

For Level 2 and 3 of the fair value hierarchy, where appropriate, valuations are adjusted for various factors such as liquidity, bid/offer spreads and credit considerations (nonperformance risk). We regularly monitor these factors along with significant market inputs and assumptions used in our fair value measurements and evaluate the level of the valuation input according to the fair value hierarchy. This may result in a transfer between levels in the hierarchy from period to period. As of March 31, 2019 and March 31, 2018, we did not have any Level 1 derivative contracts. No amounts were transferred between levels in the fair value hierarchy.

All of the Company's derivative instruments are carried at fair value in the statements of financial position prior to considering master netting agreements.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table presents our derivative assets and liabilities which were measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy as of March 31, 2019 and March 31, 2018 (in millions). The table below also discloses the net fair value of the derivative instruments after considering the impact of master netting agreements.

	March 31,			
	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Level 2 instruments				
Metal contracts	\$ 45	\$ (45)	\$ 139	\$ (65)
Currency exchange contracts	27	(44)	20	(40)
Energy contracts	—	(2)	2	(2)
Total level 2 instruments	\$ 72	\$ (91)	\$ 161	\$ (107)
Level 3 instruments				
Energy contracts	—	(3)	—	(7)
Total level 3 instruments	\$ —	\$ (3)	\$ —	\$ (7)
Total gross	\$ 72	\$ (94)	\$ 161	\$ (114)
Netting adjustment (A)	\$ (36)	\$ 36	\$ (57)	\$ 57
Total net	\$ 36	\$ (58)	\$ 104	\$ (57)

(A) Amounts represent the impact of legally enforceable master netting agreements that allow the Company to settle positive and negative positions with the same counterparties.

We recognized unrealized gains of \$1 million for the year ended March 31, 2019 related to Level 3 financial instrument that was still held as of March 31, 2019. These unrealized gains were included in "Other expenses, net."

The following table presents a reconciliation of fair value activity for Level 3 derivative contracts (in millions).

	Level 3 – Derivative Instruments (A)
Balance as of March 31, 2017	\$ (9)
Unrealized/realized gain included in earnings (B)	5
Settlements (B)	(3)
Balance as of March 31, 2018	\$ (7)
Unrealized/realized gain included in earnings (B)	6
Unrealized/realized (loss) included in AOCI (C)	3
Settlements (B)	(5)
Balance as of March 31, 2019	\$ (3)

(A) Represents net derivative liabilities.

(B) Included in "Other expenses, net"

(C) Included in "Net change in fair value of effective portion of cash flow hedges."

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Financial Instruments Not Recorded at Fair Value

The table below presents the estimated fair value of certain financial instruments not recorded at fair value on a recurring basis (in millions). The table excludes short-term financial assets and liabilities for which we believe carrying value approximates fair value. We value long-term receivables and long-term debt using Level 2 inputs. Valuations are based on either market and/or broker ask prices when available or on a standard credit adjusted discounted cash flow model using market observable inputs.

	March 31,			
	2019		2018	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets				
Long-term receivables from related parties	\$ —	\$ —	\$ 3	\$ 3
Liabilities				
Total debt — third parties (excluding short term borrowings)	\$ 4,347	\$ 4,472	\$ 4,457	\$ 4,569

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

18. OTHER EXPENSES

“Other expenses, net” is comprised of the following (in millions).

	Year Ended March 31,		
	2019	2018	2017
Currency losses (gains), net (A)	\$ 1	\$ 1	\$ (5)
Unrealized losses (gains) on change in fair value of derivative instruments, net (B)	10	(20)	(5)
Realized (gains) losses on change in fair value of derivative instruments, net (B)	(12)	20	61
Loss on sale of assets, net	6	7	6
Loss on Brazilian tax litigation, net (C)	2	3	5
Interest income	(10)	(9)	(11)
Non-operating net periodic benefit cost (D)	35	42	49
Other, net	12	7	17
Other expenses, net (E)	<u>\$ 44</u>	<u>\$ 51</u>	<u>\$ 117</u>

(A) Includes “(Gain) loss recognized on balance sheet remeasurement currency exchange contracts, net.”

(B) See Note 15 — Financial Instruments and Commodity Contracts for further details.

(C) See Note 20 — Commitments and Contingencies for further details.

(D) Represents net periodic benefit cost, exclusive of service cost for the Company's pension and other post-retirement plans. For further details, refer to Note 1 — Business and Summary of Significant Accounting Policies.

(E) We reclassified the "Loss on sale of a business" for the year ended March 31, 2017 of \$27 million from "Other expenses, net" to "(Gain) loss on sale of a business, net" in the consolidated statement of operations for presentation purposes. In fiscal 2017, we sold our equity interest in Aluminium Company of Malaysia Berhad (ALCOM), a previously consolidated subsidiary. The sale resulted in a loss of \$27 million during the year ended March 31, 2017.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

19. INCOME TAXES

We are subject to Canadian and United States federal, state, and local income taxes as well as other foreign income taxes. The domestic (Canada) and foreign components of our "Income before income taxes" (and after removing our "Equity in net loss of non-consolidated affiliates") are as follows (in millions).

	Year Ended March 31,		
	2019	2018	2017
Domestic (Canada)	\$ (80)	\$ (50)	\$ (286)
Foreign (all other countries)	713	906	491
Pre-tax income before equity in net loss of non-consolidated affiliates	<u>\$ 633</u>	<u>\$ 856</u>	<u>\$ 205</u>

The components of the "Income tax provision" are as follows (in millions).

	Year Ended March 31,		
	2019	2018	2017
Current provision:			
Domestic (Canada)	\$ 5	\$ 4	\$ 8
Foreign (all other countries)	147	188	137
Total current	<u>\$ 152</u>	<u>\$ 192</u>	<u>\$ 145</u>
Deferred provision:			
Domestic (Canada)	—	—	—
Foreign (all other countries)	50	41	6
Total deferred	<u>\$ 50</u>	<u>\$ 41</u>	<u>\$ 6</u>
Income tax provision	<u>\$ 202</u>	<u>\$ 233</u>	<u>\$ 151</u>

The reconciliation of the Canadian statutory tax rates to our effective tax rates are shown below (in millions, except percentages).

	Year Ended March 31,		
	2019	2018	2017
Pre-tax income before equity in net loss on non-consolidated affiliates	<u>\$ 633</u>	<u>\$ 856</u>	<u>\$ 205</u>
Canadian statutory tax rate	<u>25%</u>	<u>25%</u>	<u>25%</u>
Provision at the Canadian statutory rate	<u>\$ 158</u>	<u>\$ 214</u>	<u>\$ 51</u>
Increase (decrease) for taxes on income (loss) resulting from:			
Exchange translation items	14	10	9
Exchange remeasurement of deferred income taxes	(9)	(3)	8
Change in valuation allowances	17	20	67
Tax credits	(16)	(20)	(14)
Expense (income) items not subject to tax	1	(5)	(3)
State tax expense, net	4	5	1
Dividends not subject to tax	—	—	(23)
Enacted tax rate changes	2	(19)	1
Tax rate differences on foreign earnings	33	23	36
Uncertain tax positions	3	7	6
Prior year adjustments	2	1	4
Income tax settlements	(4)	1	6
Non-deductible expenses and other — net	(3)	(1)	2
Income tax provision	<u>\$ 202</u>	<u>\$ 233</u>	<u>\$ 151</u>
Effective tax rate	<u>32%</u>	<u>27%</u>	<u>73%</u>

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Our effective tax rate differs from the Canadian statutory rate primarily due to the following factors: (1) pre-tax foreign currency gains or losses with no tax effect and the tax effect of U.S. dollar denominated currency gains or losses with no pre-tax effect, which is shown above as exchange translation items; (2) the remeasurement of deferred income taxes due to foreign currency changes, which is shown above as exchange remeasurement of deferred income taxes; (3) changes in valuation allowances; and (4) differences between the Canadian statutory and foreign statutory tax rates applied to entities in different jurisdictions shown above as tax rate differences on foreign earnings.

We continue to maintain valuation allowances in Canada and certain foreign jurisdictions primarily related to tax losses where we believe it is more likely than not that we will be unable to utilize those losses. The impact on our income tax provision of the change in these valuation allowances during the year ended March 31, 2019 was an increase of \$17 million. For fiscal years 2018 and 2017, changes in valuation allowances were \$20 million and \$67 million, respectively. Both of these years included larger tax losses in Canada where we believe it is more likely than not that we will be unable to utilize these losses.

We earn tax credits in a number of the jurisdictions in which we operate. Primarily comprised of foreign tax credits in the U.K. of \$3 million in the current year, empire zone credits in New York of \$4 million and tax investment credits in Brazil of \$2 million. The impact on our income tax provision of credits during the year ended March 31, 2019 was a benefit of \$16 million. However, legislation enacted in New York state on March 31, 2014 established a zero percent statutory income tax rate for manufacturers. As a result, the current year empire zone credits in New York are offset with a corresponding valuation allowance of \$4 million.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the U.S. Tax Cuts and Jobs Act of 2017 (the "Act"). The Act makes broad and complex changes to the U.S. tax code, including, but not limited to, (1) reducing the U.S. federal corporate tax rate from 35% to 21% effective January 1, 2018 and (2) bonus depreciation that allows for full expensing of qualified property. Simultaneous with the Act, the SEC Staff released Accounting Bulletin No. 118 ("SAB 118"), which allows the use of provisional amounts (reasonable estimates) if the analysis of the impacts of the Act have not been completed when financial statements are issued. During the third quarter of fiscal year 2019, we finalized the computations of the income tax effects of the Act. As such, in accordance with SAB 118, our accounting for the effects of the Act is complete. We did not significantly adjust provisional amounts recorded in the prior fiscal year and the SAB 118 measurement period subsequently ended on December 22, 2018. Although we no longer consider these amounts to be provisional, the determination of the Act's income tax effects may change following future legislation or further interpretation of the Act based on the publication of recently proposed U.S. Treasury regulations and guidance from the Internal Revenue Service and state tax authorities.

Deferred Income Taxes

Deferred income taxes recognize the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the carrying amounts used for income tax purposes, and the impact of available net operating loss (NOL) and tax credit carryforwards. These items are stated at the enacted tax rates that are expected to be in effect when taxes are actually paid or recovered.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Our deferred income tax assets and deferred income tax liabilities are as follows (in millions).

	March 31,	
	2019	2018
Deferred income tax assets:		
Provisions not currently deductible for tax purposes	\$ 345	\$ 323
Tax losses/benefit carryforwards, net	725	779
Depreciation and amortization	60	46
Other assets	—	6
Total deferred income tax assets	1,130	1,154
Less: valuation allowance	(742)	(727)
Net deferred income tax assets	\$ 388	\$ 427
Deferred income tax liabilities:		
Depreciation and amortization	\$ 339	\$ 384
Inventory valuation reserves	83	83
Monetary exchange gains, net	21	12
Other liabilities	26	37
Total deferred income tax liabilities	\$ 469	\$ 516
Net deferred income tax liabilities	\$ 81	\$ 89

ASC 740 requires that we reduce our deferred income tax assets by a valuation allowance if, based on the weight of the available evidence, it is more likely than not that all or a portion of a deferred tax asset will not be realized. After consideration of all evidence, both positive and negative, management concluded that it is more likely than not that we will be unable to realize a portion of our deferred tax assets and that valuation allowances of \$742 million and \$727 million were necessary as of March 31, 2019 and 2018, respectively.

It is reasonably possible that our estimates of future taxable income may change within the next 12 months, resulting in a change to the valuation allowance in one or more jurisdictions.

As of March 31, 2019, we had net operating loss carryforwards of approximately \$585 million (tax effected) and tax credit carryforwards of \$140 million, which will be available to offset future taxable income and tax liabilities, respectively. The carryforwards will begin expiring in fiscal year 2020. As of March 31, 2019, valuation allowances of \$542 million, \$128 million and \$72 million had been recorded against net operating loss carryforwards, tax credit carryforwards and other deferred tax assets, respectively, where it appeared more likely than not that such benefits will not be realized. The net operating loss carryforwards are predominantly in Canada, the U.S., Italy, Germany, Switzerland and the U.K.

As of March 31, 2018, we had net operating loss carryforwards of approximately \$639 million (tax effected) and tax credit carryforwards of \$140 million, which will be available to offset future taxable income and tax liabilities, respectively. The carryforwards will begin expiring in fiscal 2019 with some amounts being carried forward indefinitely. As of March 31, 2018, valuation allowances of \$541 million, \$119 million and \$67 million had been recorded against net operating loss carryforwards, tax credit carryforwards and other deferred tax assets, respectively, where it appeared more likely than not that such benefits will not be realized. The net operating loss carryforwards are predominantly in Canada, the U.S., Italy, Germany, Switzerland, China and the U.K.

Although realization is not assured, management believes it is more likely than not that all the remaining net deferred tax assets will be realized. In the near term, the amount of deferred tax assets considered realizable could be reduced if we do not generate sufficient taxable income in certain jurisdictions.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

As of March 31, 2019, we had cumulative earnings of approximately \$3 billion for which we had not provided Canadian income tax or withholding taxes because we consider them to be indefinitely reinvested. We acknowledge that we would need to accrue and pay taxes should we decide to repatriate cash and short-term investments generated from earnings of our foreign subsidiaries that are considered indefinitely reinvested. Except for those jurisdictions where we have already distributed and paid taxes on the earnings, we have reinvested and expect to continue to reinvest undistributed earnings of foreign subsidiaries indefinitely. Cash and cash equivalents held by foreign subsidiaries that are indefinitely reinvested are used to cover expansion and short-term cash flow needs of such subsidiaries. The amounts considered indefinitely reinvested would be subject to possible Canadian taxation only if remitted as dividends. However, due to our full valuation allowance position of \$630 million in Canada, in excess of \$502 million of net operating loss carryforwards, exempt surpluses for Canadian tax purposes, \$56 million of tax credits and other deferred tax assets of \$72 million, a portion of the cumulative earnings would not be taxed if distributed. Due to the complex structure of our international holdings, and the various methods available for repatriation, quantification of the deferred tax liability, if any, associated with these undistributed earnings is not practicable.

Tax Uncertainties

As of March 31, 2019 and 2018, the total amount of unrecognized benefits that, if recognized, would affect the effective income tax rate in future periods based on anticipated settlement dates is \$24 million and \$44 million, respectively.

Tax authorities continue to examine certain other of our tax filings for fiscal years 2005 through 2017. As a result of further settlement of audits, judicial decisions, the filing of amended tax returns or the expiration of statutes of limitations, our reserves for unrecognized tax benefits, as well as reserves for interest and penalties, may decrease in the next 12 months by an amount up to approximately \$1 million. With few exceptions, tax returns for all jurisdictions for all tax years before 2005 are no longer subject to examination by taxing authorities.

Our policy is to record interest and penalties related to unrecognized tax benefits in the income tax provision (benefit). As of March 31, 2019, 2018 and 2017, we had \$4 million, \$9 million and \$5 million accrued, respectively, for interest and penalties. For the year ended March 31, 2019, we recognized \$5 million benefit related to accrued interest and penalties. For the years ended March 31, 2018 and 2017 we recognized tax expense of \$3 million and \$1 million, respectively, related to changes in accrued interest and penalties.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (in millions):

	Year Ended March 31,		
	2019	2018	2017
Beginning balance	\$ 44	\$ 36	\$ 34
Additions based on tax positions related to the current period	3	4	5
Additions based on tax positions of prior years	3	6	—
Reductions based on tax positions of prior years	(1)	(7)	—
Settlements (A)	(22)	—	(1)
Foreign exchange	(3)	5	(2)
Ending Balance	\$ 24	\$ 44	\$ 36

(A) The amount reported in fiscal 2019 is due to the effective settlement of a certain tax audit for fiscal years 2009 through 2012.

Income Taxes Payable

Our consolidated balance sheets include income taxes payable (net) of \$41 million and \$38 million as of March 31, 2019 and 2018, respectively. Of these amounts, \$51 million and \$29 million are reflected in "Accrued expenses and other current liabilities" as of March 31, 2019 and 2018, respectively.

20. COMMITMENTS AND CONTINGENCIES

We are party to, and may in the future be involved in, or subject to, disputes, claims and proceedings arising in the ordinary course of our business, including some we assert against others, such as environmental, health and safety, product liability, employee, tax, personal injury and other matters. For certain matters in which the Company is involved for which a loss is reasonably possible, we are unable to estimate a loss. For certain other matters for which a loss is reasonably possible and the loss is estimable, we have estimated the aggregated range of loss as \$0 to \$80 million. This estimated aggregate range of reasonably possible losses is based upon currently available information. The Company's estimates involve significant judgment, and therefore, the estimate will change from time to time and actual losses may differ from the current estimate. We review the status of, and estimated liability related to, pending claims and civil actions on a quarterly basis. The evaluation model includes all asserted and unasserted claims that can be reasonably identified, including claims relating to our responsibility for compliance with environmental, health and safety laws and regulations in the jurisdictions in which we operate or formerly operated. The estimated costs in respect of such reported liabilities are not offset by amounts related to insurance or indemnification arrangements unless otherwise noted.

Environmental Matters

We own and operate numerous manufacturing and other facilities in various countries around the world. Our operations are subject to environmental laws and regulations from various jurisdictions, which govern, among other things, air emissions, wastewater discharges, the handling, storage and disposal of hazardous substances and wastes, the remediation of contaminated sites, post-mining reclamation and restoration of natural resources, and employee health and safety. Future environmental regulations may impose stricter compliance requirements on the industries in which we operate. Additional equipment or process changes at some of our facilities may be needed to meet future requirements. The cost of meeting these requirements may be significant. Failure to comply with such laws and regulations could subject us to administrative, civil or criminal penalties, obligations to pay damages or other costs, and injunctions and other orders, including orders to cease operations.

We are involved in proceedings under the U.S. Comprehensive Environmental Response, Compensation, and Liability Act, also known as CERCLA or Superfund, or analogous state provisions regarding liability arising from the usage, storage, treatment or disposal of hazardous substances and wastes at a number of sites in the United States, as well as similar proceedings under the laws and regulations of the other jurisdictions in which we have operations, including Brazil and certain countries in the European Union. Many of these jurisdictions have laws that impose joint and several liability, without regard to fault or the legality of the original conduct, for the costs of environmental remediation, natural resource damages, third party claims, and other expenses. In addition, we are, from time to time, subject to environmental reviews and investigations by relevant governmental authorities. We are also involved in claims and litigation filed on behalf of persons alleging exposure to substances and other hazards at our current and former facilities.

We have established liabilities based on our estimates for currently anticipated costs associated with environmental matters. We estimate that the costs related to our environmental liabilities as of March 31, 2019 were approximately \$9 million, of which \$7 million was associated with restructuring actions and the remaining undiscounted clean-up costs were \$2 million. As of March 31, 2019, \$5 million is included in "Accrued expenses and other current liabilities" and the remaining is within "Other long-term liabilities" in our accompanying consolidated balance sheets. As of March 31, 2018, we reported \$14 million of total environmental liabilities in our consolidated balance sheet.

Brazil Tax and Legal Matters

Under a federal tax dispute settlement program established by the Brazilian government, we have settled several disputes with Brazil's tax authorities regarding various forms of manufacturing taxes and social security contributions. In most cases, we are paying the settlement amounts over a period of 180 months, although in some cases we are paying the settlement amounts over a shorter period. Total settlement liabilities were \$44 million and \$58 million for the periods ended March 31, 2019 and March 31, 2018, respectively. As of March 31, 2019, \$8 million is included in "Accrued expenses and other current liabilities" and the remaining is within "Other long-term liabilities" in our accompanying consolidated balance sheets.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

In addition to the disputes we have settled under the federal tax dispute settlement program, we are involved in several other unresolved tax and other legal claims in Brazil. Total liabilities for other disputes and claims were \$23 million and \$29 million for the periods ended March 31, 2019 and March 31, 2018, respectively. As of March 31, 2019, \$2 million is included in "Accrued expenses and other current liabilities" and the remaining is within "Other long-term liabilities" in our accompanying consolidated balance sheets. Additionally, we have included in the range of reasonably possible losses disclosed above, any unresolved tax disputes or other contingencies for which a loss is reasonably possible and estimable. The interest cost recorded on these settlement liabilities, partially offset by interest earned on the cash deposit is reported as "Loss on Brazilian tax litigation, net" in Note 18 — Other Expenses.

During fiscal 2019, we received a favorable ruling from the Brazilian court that recognized the right to exclude certain taxes related to social security contributions on gross revenues, also known as PIS and COFINS. The ruling excludes ICMS (similar to VAT) from the calculation basis of social security financing contributions on net revenue (COFINS) from calendar years 2007 to 2014. As a result of this case, we have the right to apply for tax credits for the amounts overpaid during that period. The mentioned credit and corresponding interest can be used to offset various Brazilian federal taxes in future years. The exact methodology to compute the amount of the tax credit is still being determined by the tax authorities. Novelis hired external advisors to assist with the compilation of documentation required to claim the credit. We have estimated that it is probable to receive a benefit, net of fees and applicable Brazilian taxes, of \$3.3 million (translated into US dollars as of March 31, 2019) associated with tax years 2009 to 2014. We reflected this benefit by recording \$3.0 million of "Net sales" on the consolidated statement of operations, \$2.3 million interest income and \$0.2 million other expense (PIS and COFINS) in the "Other expenses, net" line item of our consolidated statement of operations offset by \$1.8 million of "Income tax provision" in our consolidated statement of operations.

21. SEGMENT, GEOGRAPHICAL AREA, MAJOR CUSTOMER AND MAJOR SUPPLIER INFORMATION

Segment Information

Due in part to the regional nature of supply and demand of aluminum rolled products and to best serve our customers, we manage our activities based on geographical areas and are organized under four operating segments: North America, Europe, Asia and South America. All of our segments manufacture aluminum sheet and light gauge products.

The following is a description of our operating segments:

North America. Headquartered in Atlanta, Georgia, this segment operates eight plants, including two fully dedicated recycling facilities and two facilities with recycling operations, in two countries.

Europe. Headquartered in Küsnacht, Switzerland, this segment operates ten plants, including two fully dedicated recycling facilities and three facilities with recycling operations, in four countries.

Asia. Headquartered in Seoul, South Korea, this segment operates three plants, including two facilities with recycling operations, in three countries.

South America. Headquartered in Sao Paulo, Brazil, this segment comprises power generation operations, and operates two plants, including a facility with recycling operations, in Brazil.

Net sales and expenses are measured in accordance with the policies and procedures described in Note 1 — Business and Summary of Significant Accounting Policies.

We measure the profitability and financial performance of our operating segments based on “Segment income.” “Segment income” provides a measure of our underlying segment results that is in line with our approach to risk management. We define “Segment income” as earnings before (a) “depreciation and amortization”; (b) “interest expense and amortization of debt issuance costs”; (c) “interest income”; (d) unrealized gains (losses) on change in fair value of derivative instruments, net, except for foreign currency remeasurement hedging activities, which are included in segment income; (e) impairment of goodwill; (f) gain or loss on extinguishment of debt; (g) noncontrolling interests' share; (h) adjustments to reconcile our proportional share of “Segment income” from non-consolidated affiliates to income as determined on the equity method of accounting; (i) “restructuring and impairment, net”; (j) gains or losses on disposals of property, plant and equipment and businesses, net; (k) other costs, net; (l) litigation settlement, net of insurance recoveries; (m) sale transaction fees; (n) provision or benefit for taxes on income (loss); (o) cumulative effect of accounting change, net of tax; (p) metal price lag; (q) business acquisition and other integration costs.

Effective in the second quarter of fiscal 2019, management removed the impact of business acquisition and other integration costs from Segment income in order to enhance the visibility of the underlying operating performance of the Company. The impact of “Business acquisition and other integration costs”, which are primarily legal and professional fees incurred in the periods presented above associated with our pending acquisition of Aleris, is now reported as a separate line item in the reconciliation and on our consolidated statement of operations. This change does not impact our consolidated financial statements.

Effective in the first quarter of fiscal 2018, management removed the impact of metal price lag from Segment income in order to enhance the visibility of the underlying operating performance of the Company. The impact of “Metal price lag” is reported as a separate line item in the reconciliation. This change does not impact our consolidated financial statements. Segment income for prior periods presented has been updated to reflect this change.

The tables below show selected segment financial information (in millions). The “Eliminations and Other” column in the table below includes eliminations and functions that are managed directly from our corporate office that have not been allocated to our operating segments, as well as the adjustments for proportional consolidation, and eliminations of intersegment “Net sales.” The financial information for our segments includes the results of our affiliates on a proportionately consolidated basis, which is consistent with the way we manage our business segments. In order to reconcile the financial information for the segments shown in the tables below to the relevant U.S. GAAP based measures, we must adjust proportional consolidation of each line item. The “Eliminations and Other” in “Net sales – third party” includes the net sales attributable to our joint venture party, Tri-Arrows, for our Logan affiliate because we consolidate 100% of the Logan joint venture for U.S. GAAP, but we manage our Logan affiliate on a proportionately consolidated basis. See Note 8 — Consolidation and Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for further information about these affiliates. Additionally, we eliminate intersegment sales and intersegment income for reporting on a consolidated basis.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Selected Segment Financial Information

Selected Operating Results Year Ended March 31, 2019	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 4,580	\$ 3,266	\$ 2,154	\$ 2,059	\$ 267	\$ 12,326
Net sales - intersegment	1	110	36	32	(179)	—
Net sales	<u>\$ 4,581</u>	<u>\$ 3,376</u>	<u>\$ 2,190</u>	<u>\$ 2,091</u>	<u>\$ 88</u>	<u>\$ 12,326</u>

Depreciation and amortization	\$ 150	\$ 116	\$ 63	\$ 66	\$ (45)	\$ 350
Income tax provision	\$ 45	\$ 15	\$ 19	\$ 106	\$ 17	\$ 202
Cash capital expenditures	\$ 147	\$ 80	\$ 70	\$ 65	\$ (11)	\$ 351

March 31, 2019						
Investment in and advances to non-consolidated affiliates	\$ —	\$ 478	\$ 314	\$ —	\$ —	\$ 792
Total assets	\$ 2,918	\$ 2,872	\$ 1,717	\$ 1,831	\$ 225	\$ 9,563

Selected Operating Results Year Ended March 31, 2018	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 3,933	\$ 3,390	\$ 2,066	\$ 1,851	\$ 222	\$ 11,462
Net sales - intersegment	18	57	44	80	(199)	—
Net sales	<u>\$ 3,951</u>	<u>\$ 3,447</u>	<u>\$ 2,110</u>	<u>\$ 1,931</u>	<u>\$ 23</u>	<u>\$ 11,462</u>

Depreciation and amortization	\$ 149	\$ 112	\$ 65	\$ 65	\$ (37)	\$ 354
Income tax provision	\$ 13	\$ 19	\$ 108	\$ 77	\$ 16	\$ 233
Cash capital expenditures	\$ 78	\$ 71	\$ 36	\$ 38	\$ 3	\$ 226

March 31, 2018						
Investment in and advances to non-consolidated affiliates	\$ —	\$ 522	\$ 327	\$ —	\$ —	\$ 849
Total assets	\$ 2,569	\$ 3,163	\$ 1,796	\$ 1,781	\$ 206	\$ 9,515

Selected Operating Results Year Ended March 31, 2017	North America	Europe	Asia	South America	Eliminations and Other	Total
Net sales - third party	\$ 3,226	\$ 2,930	\$ 1,771	\$ 1,448	\$ 216	\$ 9,591
Net sales - intersegment	2	38	20	62	(122)	—
Net sales	<u>\$ 3,228</u>	<u>\$ 2,968</u>	<u>\$ 1,791</u>	<u>\$ 1,510</u>	<u>\$ 94</u>	<u>\$ 9,591</u>

Depreciation and amortization	\$ 149	\$ 106	\$ 59	\$ 63	\$ (17)	\$ 360
Income tax provision	\$ 18	\$ 12	\$ 20	\$ 88	\$ 13	\$ 151
Cash capital expenditures	\$ 80	\$ 65	\$ 38	\$ 39	\$ 2	\$ 224

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table displays the reconciliation from "Net income attributable to our common shareholder" to "Segment income" from reportable segments (in millions).

	Year Ended March 31,		
	2019	2018	2017
Net income attributable to our common shareholder	\$ 434	\$ 635	\$ 45
Noncontrolling interests	—	(13)	1
Income tax provision	202	233	151
Depreciation and amortization	350	354	360
Interest expense and amortization of debt issuance costs	268	255	294
Adjustment to reconcile proportional consolidation	58	51	28
Unrealized losses (gains) on change in fair value of derivative instruments, net	10	(20)	(5)
Realized gains on derivative instruments not included in segment income	(2)	—	(5)
Gain on assets held for sale	—	—	(2)
Loss on extinguishment of debt	—	—	134
Restructuring and impairment, net	2	34	10
Loss on sale of fixed assets	6	7	6
(Gain) loss on sale of a business	—	(318)	27
Metal price lag	4	(4)	31
Business acquisition and other integration related costs (A)	33	—	—
Other, net	3	1	10
Total of reportable segments	\$ 1,368	\$ 1,215	\$ 1,085

(A) "Business acquisition and other integration related costs" are primarily legal and professional fees associated with our pending acquisition of Aleris. The acquisition is subject to customary closing conditions and regulatory approvals.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

The following table displays "Segment income" from reportable segments by region (in millions).

	Year Ended March 31,		
	2019	2018	2017
North America	\$ 552	\$ 474	\$ 380
Europe	226	219	208
Asia	196	167	163
South America	394	363	337
Intersegment eliminations	—	(8)	(3)
Total of reportable segments	\$ 1,368	\$ 1,215	\$ 1,085

Geographical Area Information

We had 23 operating facilities in ten countries as of March 31, 2019. The tables below present "Net sales" and "Long-lived assets and other intangible assets" by geographical area (in millions). "Net sales" are attributed to geographical areas based on the origin of the sale. "Long-lived assets and other intangible assets" are attributed to geographical areas based on asset location and exclude investments in and advances to our non-consolidated affiliates and goodwill.

	Year Ended March 31,		
	2019	2018	2017
Net sales:			
United States	\$ 4,725	\$ 4,041	\$ 3,336
Asia and Other Pacific	2,154	2,068	1,771
Brazil	2,059	1,851	1,448
Canada	121	113	106
Germany	2,749	2,853	2,428
Other Europe	518	536	502
Total Net sales	\$ 12,326	\$ 11,462	\$ 9,591

	March 31,	
	2019	2018
Long-lived assets and other intangibles:		
United States	\$ 1,421	\$ 1,338
Asia and Other Pacific	478	490
Brazil	796	796
Canada	56	60
Germany	265	287
Other Europe	720	549
Total long-lived assets	\$ 3,736	\$ 3,520

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

Information about Product Sales, Major Customers and Primary Supplier

Product Sales

The following table displays our Net sales by value stream (in millions).

	Year Ended March 31,		
	2019	2018	2017
Can	\$ 6,643	\$ 5,962	\$ 5,007
Automotive	2,967	2,802	2,238
Specialty (and other)	2,716	2,698	2,346
Net sales	\$ 12,326	\$ 11,462	\$ 9,591

Major Customers

The following table displays net sales to customers representing 10% or more of our total “Net sales.”

	Year Ended March 31,		
	2019	2018	2017
Ball	22%	21%	27%
Ford	10%	10%	10%

Primary Supplier

Rio Tinto (RT) is our primary supplier of metal inputs, including prime and sheet ingot. The table below shows our purchases from RT as a percentage of our total combined metal purchases.

	Year Ended March 31,		
	2019	2018	2017
Purchases from RT as a percentage of total combined metal purchases	10%	10%	10%

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

22. SUPPLEMENTAL INFORMATION

Supplemental cash flow information is as follows (in millions).

	Year Ended March 31,		
	2019	2018	2017
Supplemental disclosures of cash flow information:			
Interest paid	\$ 248	\$ 254	\$ 288
Income taxes paid (A)	\$ 159	\$ 191	\$ 128
Capital expenditures accounts payable and accrued liabilities	\$ 136	\$ 53	\$ 42

(A) In the second quarter of fiscal 2018, Novelis Korea, Ltd, a subsidiary of Novelis, sold a portion of its shares in Ulsan Aluminum, Ltd., which resulted in higher cash taxes paid in fiscal 2018.

During the years ended March 31, 2019 and 2018, we did not incur any new capital lease obligations. During the years ended March 31, 2017, we incurred capital lease obligations of \$2 million.

Novelis Inc.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS - (Continued)

23. QUARTERLY RESULTS (UNAUDITED)

The tables below present select operating results (in millions) by period:

	(Unaudited) Quarter Ended			
	June 30, 2018	September 30, 2018	December 31, 2018	March 31, 2019
Net sales	\$ 3,097	\$ 3,136	\$ 3,009	\$ 3,084
Cost of goods sold (exclusive of depreciation and amortization)	2,591	2,657	2,568	2,606
Selling, general and administrative expenses	117	127	129	129
Depreciation and amortization	86	86	88	90
Interest expense and amortization of debt issuance costs	66	68	67	67
Research and development expenses	15	17	18	22
Restructuring and impairment, net	1	—	1	—
Equity in net income of non-consolidated affiliates	—	(1)	(1)	(1)
Business acquisition and other integration related costs	2	8	14	9
Other expense (income), net	29	(6)	10	11
Income tax provision	53	64	37	48
Net income	137	116	78	103
Net income attributable to noncontrolling interests	—	—	—	—
Net income attributable to our common shareholder	\$ 137	\$ 116	\$ 78	\$ 103

	(Unaudited) Quarter Ended			
	June 30, 2017	September 30, 2017	December 31, 2017	March 31, 2018
Net sales	\$ 2,669	\$ 2,794	\$ 2,933	\$ 3,066
Cost of goods sold (exclusive of depreciation and amortization)	2,256	2,354	2,490	2,600
Selling, general and administrative expenses	101	118	122	125
Depreciation and amortization	90	91	86	87
Interest expense and amortization of debt issuance costs	64	64	64	63
Research and development expenses	15	16	17	16
Gain on sale of a business, net	—	(318)	—	—
Restructuring and impairment, net	1	7	25	1
Equity in net loss of non-consolidated affiliates	—	1	—	—
Other (income) expense, net	(2)	38	4	11
Income tax provision	43	116	20	54
Net income	101	307	105	109
Net income (loss) attributable to noncontrolling interests	—	—	(16)	3
Net income attributable to our common shareholder	\$ 101	\$ 307	\$ 121	\$ 106

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

Item 9A. Controls and Procedures**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the Exchange Act) is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, include controls and procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including the Principal Executive Officer and the Principal Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. Any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system are met.

As required by Securities and Exchange Commission rules, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this Form 10-K. This evaluation was carried out under the supervision and with the participation of our management, including our Principal Executive Officer and Principal Financial Officer. Based on this evaluation, our management, including our Principal Executive Officer and Principal Financial Officer, has concluded that our disclosure controls and procedures were effective as of March 31, 2019.

Management's Report on Internal Control over Financial Reporting

The report of management on our internal control over financial reporting as of March 31, 2019 is set forth in Part II, "Item 8. Financial Statements and Supplementary Data" in this report.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information

On May 2, 2019, we announced the appointment of Francisco Pires, 50, as President, Novelis South America, effective June 3, 2019. In this role, Mr. Pires will be responsible for providing strategic leadership to our South America business by working with management to establish and execute long-range goals, strategies, plans and policies. Mr. Pires succeeds Tadeu Nardocci, who has been appointed as the Company's Senior Vice President & Chief Manufacturing Officer, effective June 3.

Mr. Pires, who is currently Chief Operating Officer of Novelis South America, joined Novelis in 2012 as Director of Procurement. In 2013, he assumed the position of Director, Procurement and Supply Chain. In 2014, he was appointed Vice President, Commercial, followed by a promotion to his current role in 2018. Prior to Novelis, Mr. Pires held positions of increasing responsibility with Fibria, Votorantim Cellulose & Paper, Maxlog and Bureau Veritas. He is a graduate in naval engineering from Universidade Federal do Rio de Janeiro and has a Master of Science from COPPEAD Graduate School of Business.

Mr. Pires will receive an annual base salary of one million Brazilian reais, an annual short term target bonus of 54% of his base salary, and a long term incentive target opportunity of \$225,000. He will receive perquisites customarily provided to our executives.

On May 6, 2019, our Board of Directors approved a fiscal year 2020 executive annual incentive plan (2020 Executive AIP) and an executive long term incentive plan covering fiscal years 2020 through 2022 (2020 Executive LTIP). For additional information regarding the 2020 Executive AIP and the 2020 Executive LTIP, see Item 11 - Executive Compensation, Fiscal Year 2019 Incentive Compensation Plans, which is incorporated by reference into this item.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

Our Directors

Our Board of Directors is currently comprised of six directors. All of our directors were appointed by our sole shareholder, Hindalco. Our directors' terms will expire at each annual shareholder meeting, provided that if an election of directors is not held at an annual shareholder meeting, the directors then in office shall continue in office or until their successors shall be elected. Biographical details for each of our directors are set forth below.

Name	Director Since	Age	Position
Kumar Mangalam Birla	May 15, 2007	51	Chairman of the Board
Askaran Agarwala (B)	May 15, 2007	85	Director
D. Bhattacharya (A)(B)	May 15, 2007	70	Director and Vice Chairman of the Board
Clarence J. Chandran (A)(B)	January 6, 2005	70	Director
Satish Pai (B)	August 6, 2013	57	Director
Donald A. Stewart (A)	May 15, 2007	72	Director

(A) Member of our Audit Committee

(B) Member of our Compensation Committee

Mr. Kumar Mangalam Birla was elected as the Chairman of the Board of Directors of Novelis on May 15, 2007. Mr. Birla is the Chairman of Hindalco Industries Limited which is an industry leader in aluminum and copper. He is also the Chairman of Aditya Birla Group's leading blue-chip companies including Grasim, UltraTech Cement and Vodafone Idea Limited, Aditya Birla Capital Limited; and globally, Novelis, Aditya Birla Chemicals (Thailand) Limited. Mr. Birla also serves as director on the board of Aditya Birla Management Corporation Private Limited (as Executive Chairman), Air India Limited, and the Group's international companies spanning Thailand, Indonesia, Egypt, and Canada. Additionally, Mr. Birla is the Chancellor of the Birla Institute of Technology & Science, Pilani and the Chairman of the Board of Governors Indian Institute of Management, Ahmedabad and Indian Institute of Technology. He is a member of the London Business School's Asia Pacific Advisory Board. Mr. Birla's past affiliations include service on the boards of Maruti Udyog Limited and Tata Iron and Steel Co. Limited. He was a part time non-official director on the Central Board of Reserve Bank of India. Mr. Birla brings to the board significant global leadership experience acquired through his service as a director of numerous corporate, professional and regulatory entities in various regions of the world.

Mr. Askaran Agarwala has served as a Director of Hindalco since September 1998. He was Chairman of the Business Review Council of the Aditya Birla Group from October 2003 to March 2010. From 1982 to October 2003, he was President of Hindalco. Mr. Agarwala serves on the Compensation Committee of the Novelis Board of Directors. Mr. Agarwala also serves as a director of several other companies, including Hindalco, Udyog Services Ltd., Tanfac Industries Ltd., Aditya Birla Insurance Brokers Limited, Swiss Singapore Overseas Enterprises, Aditya Birla Power Company Limited and Aditya Birla Health Services Limited. He is a trustee of Sarla Basant Birla Param Bhakti Trust, Aditya Vikram Birla Memorial Trust and the Aditya Birla Foundation and the Hellen Keller Institute of the Deaf and Blind, among many other organizations. Mr. Agarwala's past and current service as a director of several companies and industry associations in the metals and manufacturing industries adds valuable perspective to the board. Having served as president of our parent company, Hindalco, Mr. Agarwala also brings a depth of understanding of our business and operations.

Mr. Debnarayan Bhattacharya is Vice Chairman of Novelis and serves on the Audit and Compensation Committees of the Novelis Board of Directors. He retired from his position as Managing Director of Hindalco in July 2016. Mr. Bhattacharya continues to serve as Non-Executive Director and Vice Chairman. He also serves as a director of Vodafone Idea Limited and Haldia Petrochemicals Limited. Mr. Bhattacharya's extensive knowledge of the aluminum and metals industries provides a valuable resource to the company in the setting and implementation of its operating business plans as the Company considers various strategic alternatives. Mr. Bhattacharya brings to the board a high degree of financial literacy.

Clarence J. Chandran has been a director of the Company since 2005. Mr. Chandran serves on the Compensation and Audit Committees of the Novelis Board of Directors, and acts as the Chairman of the Compensation Committee. Mr. Chandran is senior advisor of 4Front Capital Partners Inc. He is a past director of Alcan Inc. and MDS Inc. He retired as Chief Operating Officer of Nortel Networks Corporation (communications) in 2001. Mr. Chandran is a past member of the Board of Visitors of the Pratt School of Engineering at Duke University. He has acquired years of significant experience through his leadership and management of companies with international business operations. Mr. Chandran brings to the board his deep knowledge in the areas of technology, sales and global operations.

Mr. Satish Pai has served as the Managing Director of Hindalco Industries Limited since August 2016. Mr. Pai previously served as served as Deputy Managing Director of Hindalco Industries Limited from February 2014 to May 2016, and as Chief Executive Officer - Aluminum Business of Hindalco Industries Limited from August 2013 to January 2014. Prior to that, Mr. Pai served as Executive Vice President, Worldwide Operations of Schlumberger Ltd. Mr. Pai joined Schlumberger Ltd. in 1985 as a field engineer and held various positions of increased responsibility over the course of his 28 year tenure with the company. He serves on the Compensation Committee of the Novelis Board of Directors and also serves as a director of Hindalco. Mr. Pai also serves as a Director of ABB Limited, Switzerland. Mr. Pai brings extensive industry and global operating experience to the board.

Donald A. Stewart serves as Chairman of the Audit Committee of the Novelis Board of Directors. He retired as Chief Executive Officer and Director of Sun Life Financial Inc. and Sun Life Assurance Company of Canada. Mr. Stewart continues to serve as a director of Sun Life Everbright Life Insurance Company Limited. He is the Chairman of AV Group NB Inc., AV Terrace Bay Inc. and of the federal-provincial Nominating Committee for the Canada Pension Plan Investment Board. Mr. Stewart brings extensive financial management and operating experience to the board.

Our Executive Officers

The following table sets forth information for persons serving as executive officers of our Company as of April 30, 2019. Biographical details for each of our executive officers are also set forth below.

Name	Age	Position
Steven Fisher	48	President and Chief Executive Officer
Devinder Ahuja	53	Senior Vice President and Chief Financial Officer
Emilio Braghi	51	Senior Vice President and President, Novelis Europe
Nicholas Madden	62	Senior Vice President, Manufacturing Excellence and Procurement
Randal Miller	56	Vice President, Treasurer
Antonio Tadeu Coelho Nardocci	61	Senior Vice President and President, Novelis South America
Marco Palmieri	62	Senior Vice President and President, Novelis North America
Leslie J. Parrette, Jr.	57	Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary
Steven E. Pohl	59	Senior Vice President, Business Performance and Execution
Stephanie Rauls	50	Vice President, Controller and Chief Accounting Officer
Sachin Satpute	53	Senior Vice President and President, Novelis Asia
H.R. Shashikant	56	Senior Vice President and Chief Human Resources Officer

Steven Fisher is our President and Chief Executive Officer. Since joining the company in 2006, Mr. Fisher has served in a number of executive positions, most recently as Chief Financial Officer from May 2007 to November 2015. Mr. Fisher joined Novelis in February 2006 as Vice President, Strategic Planning and Corporate Development. Prior to joining Novelis, Mr. Fisher served as Vice President and Controller for TXU Energy, the non-regulated subsidiary of TXU Corp., at its headquarters in Dallas, Texas. Mr. Fisher is a member of the Business Roundtable, an association of leading U.S. companies working to promote sound public policy. In addition, he is a member of the Board of Directors for the Metro Atlanta Chamber of Commerce. Mr. Fisher received a Bachelor's Degree in Finance and Accounting from the University of Iowa.

Devinder Ahuja is our Senior Vice President and Chief Financial Officer, and has served in this role since August 2016. Before joining Novelis, Mr. Ahuja spent 15 years at Novartis Group, where he served most recently as Chief Financial Officer of the Alcon Division's North America business. Prior to that, Mr. Ahuja held positions of increasing responsibility at Novartis covering the areas of finance, strategic planning, supply chain and purchasing. During his career, Mr. Ahuja has held various finance leadership roles including posts in Switzerland, South Korea, Japan and India. Mr. Ahuja holds a Bachelor of Commerce degree from the RA Podar College of Commerce and Economics in Mumbai, India and is a Chartered Accountant.

Emilio Braghi has served as our Senior Vice President and President, Novelis Europe since September 2016. Previously, he served as Vice President, Operations, Novelis North America, since February 2015. Mr. Braghi joined Novelis in 1999 as Sales Manager, Europe. During his tenure, he has taken on many leadership roles of increasing responsibility and moved into his first general management role in 2006, when he was named head of Novelis' business in Italy. Mr. Braghi went on to hold multiple general management leadership positions with Novelis' Litho and Painted Products value streams in Europe, directing both commercial and operational activities and he joined the Asia leadership team in March 2012 as Vice President of Operations. In addition, Mr. Braghi serves as Chairman of the European Aluminum industry association. Mr. Braghi holds a degree in Engineering and Industrial Production Technologies from Politecnico di Milano in Milan, Italy.

Nicholas Madden is our Senior Vice President, Manufacturing Excellence and Procurement. Prior to this role, he served as Senior Vice President, Chief Supply Chain Officer, which he assumed in January 2012 and served as Vice President and Chief Procurement Officer from October 2006 until December 2011 and President of Novelis Europe's Can, Litho and Recycling business unit beginning in October 2004. He was Vice President of Metal Management and Procurement for Alcan's Rolled Products division in Europe from December 2000 until September 2004 and was also responsible for the secondary recycling business. Mr. Madden holds a BSc (Hons) degree in Economics and Social Studies from University College in Cardiff, Wales.

Randal P. Miller is our Vice President, Treasurer. Prior to joining Novelis in July 2008, Mr. Miller served as Vice President and Treasurer of Transocean Offshore Deepwater Drilling from May 2006 to November 2007 where he was responsible for all treasury, banking, and capital markets activities for Transocean and its subsidiaries. From 2001 to 2006, Mr. Miller served as Vice President Finance, Treasurer of Aquila, Inc. Mr. Miller earned his Bachelor of Science from Iowa State University and Masters of Business Administration from the University of Missouri - Kansas City.

Antonio Tadeu Coelho Nardocci has served as our Senior Vice President and President, Novelis South America since May 2013. He previously served as our Senior Vice President and President, Novelis Europe from June 2009 to April 2013. Prior to that, he served as our Vice President of Strategy, Innovation and Technology from August 2008 to June 2009, and as Senior Vice President and President of our South American operations from February 2005 to August 2008. Before our spin-off from Alcan, Mr. Nardocci held a number of leadership positions with Alcan, most recently serving as President of Rolled Products South America from March 2002 until January 2005. Mr. Nardocci graduated from the University of São Paulo in Brazil with a degree in metallurgy. Mr. Nardocci is Chairman of the Brazilian Aluminum Association Board.

Marco Palmieri has served as our Senior Vice President and President, Novelis North America since June 2013. He previously served as Senior Vice President and President, Novelis South America from August 2011 to May 2013. Prior to joining Novelis, Mr. Palmieri spent more than 30 years in the metals and engineering industries, including more than 25 years with Rio Tinto Alcan, where he held a succession of international leadership positions in various areas, including business development, primary metal and energy production. Before joining Novelis, Mr. Palmieri was most recently Aluminum Business Director for Votorantim Metais Ltd. Mr. Palmieri currently serves on the Board of Directors and the Executive Committee of the Aluminum Association in North America.

Leslie J. Parrette, Jr. rejoined our company in October 2009 to serve as our Senior Vice President, General Counsel and Compliance Officer, and he was appointed Corporate Secretary in February 2010. Before rejoining Novelis, Mr. Parrette served as Senior Vice President, Legal Affairs and General Counsel for WESCO International, Inc. (formerly Westinghouse Electric Supply Co.) (electrical product distribution) from March 2009 until October 2009. From March 2005 until March 2009, he served as our Senior Vice President, General Counsel, Secretary and Compliance Officer. Prior to that, Mr. Parrette served as Senior Vice President, General Counsel and Secretary for Aquila, Inc. (gas and electric utility; energy trading) from July 2000 until February 2005. Prior to that, Mr. Parrette practiced law with private law firms, including Blackwell Sanders (as a senior partner), Bryan Cave and Hale & Dorr after his graduation from law school. Mr. Parrette holds an AB in Sociology from Harvard College and received his JD from Harvard Law School.

Steven Pohl is our Senior Vice President, Business Performance and Execution and has served in this role since June 2016. Mr. Pohl joined Novelis in 2009 as Vice President Finance, Chief Financial Officer North America, and served as Vice President, Financial Planning & Analysis from 2012 to July 2015, and as Interim Chief Financial Officer from October 2015 to August 2016. Mr. Pohl came to Novelis from PPG Industries, Inc., the world's leading coatings and specialty products

company, where he served as General Auditor from 2008 to 2009. Before that, he held key finance and management positions of increasing responsibility at PPG Industries, Inc. from 1981 to 2008. Mr. Pohl earned his Bachelor of Science in Accounting from La Roche College.

Stephanie Rauls has served as our Vice President, Controller and Chief Accounting Officer since February 2016. Ms. Rauls previously served as Vice President of Global Tax since December 2013. Prior to joining Novelis, Ms. Rauls served as Vice President, Tax of Wal-Mart Stores, Inc. from 2011 to 2013, and prior to that, she was employed by GE Healthcare as a tax director from 2002 to 2011. Before joining GE Healthcare, Ms. Rauls was employed by KPMG LLP from 1994 to 2002. She earned a Bachelor of Business Administration in Accounting from the University of Wisconsin-Madison and a Juris Doctor from Valparaiso University School of Law. Ms. Rauls is a Certified Public Accountant.

Sachin Satpute is Senior Vice President and President, Novelis Asia and has served in this role since June 2016. He previously served as Chief Marketing Officer for Hindalco Industries since 2012, and was Managing Director of Aluminum Company of Malaysia (ALCOM) from April 2011 until June 2012. Prior to his most recent role with Hindalco, Mr. Satpute spent five years with Novelis in various roles of increasing responsibility. Mr. Satpute began his career at a Hindalco aluminum plant in 1987 as a development engineer. In addition to a degree in mechanical engineering from Pune University, Mr. Satpute also holds an MBA in marketing from Mumbai University, India.

H.R. Shashikant has served as our Senior Vice President and Chief Human Resources Officer since August 2015. In this role, Mr. Shashikant is responsible for the formulation and implementation of the company's worldwide human resources objectives, policies and practices. As the head of the global Human Resources function, he has responsibility for Talent Acquisition and Development, Compensation, Benefits, HRIS and Global Security. Before joining Novelis, Mr. Shashikant was Group Executive President, Group Human Resources, for the Aditya Birla Group, the Mumbai-based conglomerate of which Novelis is a part. He joined the Aditya Birla Group as a Vice President in 1999 and was instrumental in setting up HR systems, processes, and Centers of Excellence across the Group. An Economics graduate from Karnataka University in Dharwad, India, Mr. Shashikant holds a post graduate degree in Personnel Management from the Tata Institute of Social Sciences, Mumbai.

Board of Directors and Corporate Governance Matters

We are committed to our corporate governance practices, which we believe are essential to our success and to the enhancement of shareholder value. We are subject to a variety of corporate governance and disclosure requirements. Our corporate governance practices meet applicable regulatory requirements to ensure transparency and effective governance of the company.

Our Board of Directors reviews corporate governance practices in light of developing requirements in this field. As new provisions come into effect, our Board of Directors will reassess our corporate governance practices and implement changes as and when appropriate. The following is an overview of our corporate governance practices.

Novelis Board of Directors

Our Board of Directors currently has six members, all of whom are appointed by our sole shareholder. Our Board of Directors has the responsibility for stewardship of Novelis Inc., including the responsibility to ensure that we are managed in the interest of our sole shareholder, while taking into account the interests of other stakeholders. Our Board of Directors supervises the management of our business and affairs and discharges its duties and obligations in accordance with the provisions of: (1) our articles of incorporation and bylaws; (2) the charters of its committees and (3) other applicable laws and company policies.

Our corporate governance practices require that, in addition to certain statutory duties, the following matters be subject to our Board of Directors' approval: (1) capital expenditure budgets and significant investments and divestments; (2) our strategic plans; (3) the number of directors within the limits provided by our by-laws and (4) any matter which may have the potential for substantial impact on Novelis. Our Board of Directors reviews its composition and size once a year. Senior management makes regular presentations to our Board of Directors on the main areas of our business.

Corporate Governance

Interested parties may communicate with the Board of Directors, a committee or an individual director by writing to Novelis Inc., Two Alliance Center, 3560 Lenox Road N.E., Suite 2000, Atlanta, GA 30326, Attention: Corporate Secretary - Board Communication. All such communications will be compiled by the Corporate Secretary and submitted to the appropriate director or board committee. The Corporate Secretary will reply or take other actions in accordance with instructions from the applicable board contact.

Committees of Our Board of Directors

Our Board of Directors has established two standing committees: the Audit Committee and the Compensation Committee. Each committee is governed by its own charter. According to their authority as set out in their charters, the committees may engage outside advisors at the expense of Novelis.

Audit Committee and Financial Experts

Our Board of Directors has established an Audit Committee. Messrs. Stewart, Bhattacharya and Chandran are the members of the Audit Committee. Mr. Stewart, an independent director, has been identified as an “audit committee financial expert” as that term is defined in the rules and regulations of the SEC.

Our Audit Committee’s main objective is to assist our Board of Directors in fulfilling its oversight responsibilities for the integrity of our financial statements, our compliance with legal and regulatory requirements, the qualifications and independence of our independent registered public accounting firm and the performance of both our internal audit function and our independent registered public accounting firm. Under the Audit Committee charter, the Audit Committee is responsible for, among other matters:

- evaluating and compensating our independent registered public accounting firm;
- making recommendations to the Board of Directors and shareholder relating to the appointment, retention and termination of our independent registered public accounting firm;
- discussing with our independent registered public accounting firm its qualifications and independence from management;
- reviewing with our independent registered public accounting firm the scope and results of its audit;
- pre-approving all audit and permissible non-audit services to be performed by our independent registered public accounting firm;
- reviewing areas of potential significant financial risk and the steps taken to monitor and manage such exposures;
- overseeing the financial reporting process and discussing with management and our independent registered public accounting firm the interim and annual financial statements that we file with the SEC; and
- reviewing and monitoring our accounting principles, accounting policies and disclosure, internal control over financial reporting and disclosure controls and procedures.

Compensation Committee

Our Compensation Committee establishes our general compensation philosophy and oversees the development and implementation of compensation policies and programs. It also reviews and approves the level of and/or changes in the compensation of individual executive officers taking into consideration individual performance and competitive compensation practices. The committee’s specific roles and responsibilities are set out in its charter. Our Compensation Committee periodically reviews the effectiveness of our overall management organization structure and succession planning for senior management, reviews recommendations for the appointment of executive officers, and reviews annually the development process for high potential employees.

Code of Conduct and Guidelines for Ethical Behavior

Novelis has adopted a Code of Conduct and maintains a Code of Ethics for Senior Financial Officers that applies to our senior financial officers including our principal executive officer, principal financial officer, principal accounting officer, or persons performing similar functions. Copies of the Code of Conduct and the Code of Ethics for Senior Financial Officers are available on our website at www.novelis.com. We will promptly disclose any future amendments to these codes on our website as well as any waivers from these codes for executive officers and directors. Copies of these codes are also available in print from our Corporate Secretary upon request.

Item 11. Executive Compensation

This section provides a discussion of the background and objectives of our compensation programs for our named executive officers and other senior management employees. Our named executive officers are determined in accordance with rules of the Securities and Exchange Commission and include persons serving in the role of principal executive officer, persons serving in the role of principal financial officer and the three other highest paid executive officers who were employed by the Company on March 31, 2019.

Named Executive Officer	Title
Steven Fisher	President and Chief Executive Officer
Devinder Ahuja	Senior Vice President, Chief Financial Officer
Nicholas Madden	Senior Vice President, Manufacturing Excellence and Procurement
Marco Palmieri	Senior Vice President and President, Novelis North America
Leslie Parrette	Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary

Compensation Committee and Role of Management

The Compensation Committee of our board of directors (the Committee) is responsible for approving the compensation programs for our named executive officers and making decisions regarding specific compensation to be paid or awarded to them. The Committee acts pursuant to a charter approved by our board. Our Chief Human Resources Officer serves as the primary management liaison officer for the Committee. Our human resources and legal departments provide assistance to the Committee in the administration of the Committee's responsibilities.

Our named executive officers have no direct role in setting their own compensation. The Committee, however, meets with members of our management team to evaluate performance against pre-established goals, and management makes recommendations to the board regarding budgets, production and sales forecasts and other information, which affect certain goals. The Committee may seek input from our senior management concerning individual performance, expected future contributions and compensation matters generally.

Management assists the Committee by providing information needed or requested by the Committee (such as our performance against budget and objectives, historical compensation, compensation expense, current Company policies and programs, country-specific compensation practices, peer group metrics and peer group target pay levels) and by providing input and advice regarding potential changes to compensation programs and policies and their impact on the Company and its executives.

In the first quarter of each fiscal year, the Committee (1) reviews prior year performance and approves the distribution of short-term incentive and long term incentive earned payouts, if any, for the prior year, (2) reviews and approves base pay and short term incentive targets for executives for the current year, and (3) recommends to the board of directors the form of long term- incentive award vehicles and vesting performance criteria for the current cycle of the program. The Committee may employ alternative practices when appropriate under the circumstances.

The Committee did not independently engage a third party compensation consultant fiscal 2019. However, management worked with Mercer LLC (a global human resource consulting firm) to evaluate and benchmark our executive compensation program, and management shared Mercer's analysis with the Committee. Management also routinely reviews compensation surveys published by other leading global human resources consulting firms. Hay Group (a global human resource consulting firm) periodically assists management with the internal leveling of executive roles to ensure internal equity and external competitiveness of pay opportunities based on the scope and complexity of executive roles.

For executive compensation benchmarking purposes, we focus on large global companies headquartered in the southeastern United States with whom Novelis may compete for executive talent, as well as other major companies in the manufacturing and materials sectors having revenues in excess of \$2 billion. The companies that comprise our peer group may change from year to year as a result of merger and acquisition activity or revenue growth of relevant companies that moves such companies into consideration. The peer group considered in management's most recent compensation competitive analysis consisted of the following companies:

AGCO Corp	Ashland Global Holdings Inc	Kennametal Inc
Air Products & Chemicals Inc	Berry Plastics Group Inc	Newell Brands Inc
Alcoa Corp	Eastman Chemical Co	PPG Industries Inc
Altria Group Inc	Genuine Parts Co	Praxair Inc
Arconic Corp	Ingersoll-Rand PLC	Southern Co

The Committee retains discretion to set an individual executive's compensation. As a result, compensation for an executive may differ significantly from the survey or peer group data and may be influenced by factors including past performance, experience and potential, retention needs, job position and/or tenure.

Objectives and Design of Our Compensation Program

Our executive compensation program is designed to attract, retain, and reward talented executives who will contribute to our long-term financial and operational success and thereby build value for our shareholder. The program is organized around three fundamental principles:

- *Provide Total Cash and Total Direct Compensation Opportunities that are Competitive:* To enable us to attract, motivate and retain qualified executives to build long-term shareholder value, total cash compensation (base pay plus annual short-term incentives) and total direct compensation (total cash compensation plus the value of long-term incentives) opportunities for each executive are targeted at levels to be market competitive and also be appropriately positioned within the Company to ensure internal equity based on the scope and complexity of the role as it is designed at Novelis.
- *A Substantial Portion of Total Direct Compensation Should be at Risk Because it is Performance-Based:* We believe an executive's actual compensation should be linked directly to the Company's short-term and long-term financial performance and each individual's annual contribution. Consequently, a substantial portion of an executive's total direct compensation should be at risk, with amounts that are paid dependent on actual performance against pre-established objectives for both the individual and financial goals of the Company. The portion of an individual's total direct compensation that is based upon these performance objectives and financial goals should increase as the individual's business responsibilities and job scope increase. Additionally, we believe performance that exceeds target goals should be appropriately rewarded and aligned with prevalent market practices.
- *A Substantial Portion of Total Direct Compensation Should be Delivered in the Form of Long-Term Performance Based Awards:* We believe a long-term stake in the sustained financial performance of Novelis effectively aligns executive and shareholder interests and provides motivation for enhancing shareholder value.

The Committee recognizes that the engagement of top talent in critical functions may require the recruitment of new executives and involve negotiations with individual candidates. As a result, the Committee may determine in a particular situation that it is in the Company's best interests to negotiate a compensation package that varies from the principles set forth above.

Key Elements of Our Compensation Program

Our compensation program consists of four key elements: base pay, short-term (annual) incentives, long-term incentives, and employee benefits. The Committee reviews these compensation elements, generally during the first quarter of the fiscal year. The Committee also compares the competitiveness of these key elements to that of companies in our peer group and/or to available compensation survey market data. Our objective for named executive officer compensation is to be at or near the market median (50th percentile) for both target total cash compensation and total direct compensation.

Base Pay. Based on market practices, we believe it is appropriate that a minimum portion of total direct compensation be provided in a form that is fixed and recognizes individual performance in the prior fiscal year. Any changes in base salaries are generally effective July 1 of the current year, unless an executive is promoted or assumes a new role during the fiscal year.

The Committee's objective is to position base salaries for the named executive officers at or near the median of comparable positions at companies in our peer group.

Short-Term (Annual) Cash Incentives. We believe that an annual incentive opportunity is necessary to attract, retain and reward our executives. Our philosophy concerning annual incentive program design for executives is based on the guiding values below:

- Annual incentives should be directly linked with and clearly communicate the strategic priorities approved by our board of directors.
- Annual incentives should be primarily weighted on the achievement of Company-wide financial goals.
- Annual incentives should be 100% at-risk, and there should be a minimum financial performance threshold that must be attained to receive any payout.
- Performance goals should be sufficiently ambitious to drive enterprise value creation, but also be based on metrics that executives can meaningfully influence over the annual time frame, and payouts should not be concentrated on a single metric.
- Threshold, target and maximum opportunity payouts (as a percent of salary) should be comparable with opportunity payouts of executives in other benchmark companies or industries.
- The Committee retains the discretion to adjust, up or down, annual incentives earned based on the Committee's subjective assessment of individual performance.

Our Committee and board of directors, after input from management, approved our fiscal 2019 annual incentive plan (2019 AIP) during the first quarter of fiscal 2019. The performance benchmarks for the year were tied to four key metrics: (1) the Company's earnings before interest, taxes, depreciation and amortization (EBITDA) performance; (2) the Company's free cash flow performance; (3) the executive's individual performance in recognition of each individual's unique job responsibilities and annual objectives; and (4) the Company's performance against safety goals of reduction in serious injuries and reduction in total recordable incidents.

No 2019 AIP bonuses are payable with respect to any of the three incentive metrics unless overall Novelis EBITDA performance for fiscal 2019 achieves at least 75% of the financial target. If the EBITDA threshold is achieved, the actual payout will range from 60% to 200% of target payout opportunity for EBITDA and 50% to 200% of target payout opportunity for Cash Flow depending upon the actual performance results, and the actual payout under the metric for individual performance can range from 0% to 200% of target payout opportunity. Actual performance below the threshold for a particular metric results in no payout for that metric.

The table below displays the 2019 AIP target and actual performance for each goal and the amount earned based on actual performance rounded to the nearest whole dollar.

Name	Target Bonus as Percentage of Salary (A)	Performance Objective (B)	Performance Weighting	Targeted Performance (\$)	Actual Performance (C)(\$)
Steven Fisher	118%	EBITDA	40%	471,025	608,445
		Cash Flow	35%	412,147	771,862
		Personal	15%	176,634	211,961
		Safety	10%	117,756	—
			100%	1,177,562	1,592,268
Devinder Ahuja	84%	EBITDA	40%	194,308	251,026
		Cash Flow	35%	170,019	318,361
		Personal	15%	72,865	87,439
		Safety	10%	48,577	20,986
			100%	485,769	677,812
Nicholas Madden	65%	EBITDA	40%	109,925	142,013
		Cash Flow	35%	96,185	180,106
		Personal	15%	41,222	41,222
		Safety	10%	27,481	—
			100%	274,813	363,341
Marco Palmieri	65%	EBITDA	40%	133,900	172,985
		Cash Flow	35%	117,163	219,387
		Personal	15%	50,213	60,255
		Safety	10%	33,475	—
			100%	334,751	452,627
Leslie Parrette	70%	EBITDA	40%	164,735	212,821
		Cash Flow	35%	144,143	269,908
		Personal	15%	61,776	61,776
		Safety	10%	41,184	17,792
			100%	411,838	562,297

(A) Target bonus percentages are adjusted for any mid-year changes.

(B) Fiscal 2019 AIP performance metric definitions are set forth in the 2019 AIP.

(C) As operational leaders, Messrs. Fisher, Palmieri and Madden will not receive a payout for the Global Safety component as a result of a fatality that occurred at one of the manufacturing plants during the fiscal year.

Long-Term Incentives. We believe a long-term incentive program that comprises a substantial portion of each executive's total direct compensation opportunity is necessary to reward our executives. Our philosophy concerning long-term incentive design for executives is based on the guiding values below:

- Long-term incentives should motivate achievement of long-term strategic and financial goals and incentivize actions that are intended to create sustainable value for our shareholder.
- Long-term incentives should be designed to effectively retain valuable executive talent.
- Long-term incentives should create a clear and understandable platform for wealth creation that is tied closely with the long-term performance of Novelis.
- A majority of the long-term incentive award value should be at risk and tied to financial performance.
- Vesting schedules should span several years to reward long-term service.
- The value of long-term incentives as a percent of salary should be competitive with opportunity payouts of executives in other benchmark companies or industries.

During the first quarter of fiscal 2019, the Committee authorized a long-term incentive plan covering fiscal years 2019 through 2021 (2019 LTIP). Under the 2019 LTIP, participants were awarded three types of long-term incentive vehicles. Twenty percent of a participant's total long-term incentive opportunity consists of performance-based Hindalco stock appreciation rights (Hindalco SARs), 30% of the long-term incentive opportunity consists of Hindalco restricted stock units (Hindalco RSUs) and the remaining 50% consists of Novelis Performance Units ("Novelis PUs"). For additional information, see the table below setting forth grants of plan-based awards in fiscal 2019. The actual number of Hindalco SARs awarded are determined using a Black Scholes methodology. The Committee approved the fiscal 2019 long-term incentive awards for our named executive officers.

Hindalco SARs awarded in fiscal 2019 have seven-year terms and vest at a rate of 33.33% per year measured from the initial grant date, provided the Company achieves the 75% EBITDA threshold for the year. If the EBITDA threshold is not achieved, then the portion of the SARs that would otherwise vest for that year will be forfeited. Each SAR is to be settled in cash at the time of exercise based on the appreciation in value of one Hindalco share from the date of award through the date of exercise. Payout of Hindalco SARs is limited to three times the award value. SARs do not transfer any shareholder rights to a participant, and dividend equivalents are neither accumulated nor paid at any time.

Hindalco RSUs awarded in fiscal 2019 vest at a rate of 33.33% per year over three years and are not subject to performance criteria. Payout of Hindalco RSUs is also limited to three times the award value. RSUs do not transfer any shareholder rights to a participant, and dividend equivalents are neither accumulated nor paid at any time.

Novelis PUs are at risk and are measured over a three year performance period. At the end of the performance period, the number of units earned will be calculated based on the Company's average return on capital employed (ROCE) over the performance period. Actual payout will range from 50% (threshold) to 200% (maximum) of target award value, based on actual results, and will be paid in cash. Performance results between threshold level and target level or between target level and maximum level are determined by means of interpolation.

The table below shows the aggregate target long-term incentive of our named executive officers under the 2019 LTIP. The Indian Rupee exchange rate is fixed on the date of the LTIP award so that the awards are not subject to fluctuating currency exchange rates.

Named Executive Officer	2019 LTIP Target Award (\$)
Steven Fisher	\$4,000,000
Devinder Ahuja	\$680,000
Nicholas Madden	\$660,000
Marco Palmieri	\$760,000
Leslie Parrette	\$750,000

In connection with the redesign of the Company's long term incentive plan for fiscal year 2017, participants were offered a one-time opportunity to exchange their outstanding Novelis stock appreciation rights ("Novelis SARs"), other than those granted with respect to fiscal year 2011, for Novelis PUs (the "2017 LTIP Exchange"). Participants who elected to exchange their Novelis SARs in the 2017 LTIP Exchange received Novelis PUs, and their outstanding Novelis SARs (except those granted for fiscal 2011) were canceled. The PU's granted in the 2017 LTIP Exchange vested on May 5, 2019.

Employee Benefits. Our named executive officers are eligible to participate in our broad-based retirement, health and welfare, and other employee benefit plans on the same basis as other Company employees. In addition to these broad-based plans, some of our named executive officers may be eligible for certain non-qualified retirement benefits, which are designed to provide levels of retirement benefits that are limited under broad-based retirement plan caps mandated by certain regulatory restrictions on highly-compensated employees. Our named executive officers are also eligible for certain perquisites consistent with market practice. We do not view our executive perquisites as a significant element of our overall compensation structure. See the All Other Compensation column and related footnotes to the Summary Compensation Table for further information about perquisites.

Employment-Related Agreements

Retention Agreements. We may enter into retention agreements from time to time with certain key employees, including our named executive officers. These retention agreements are intended to supplement our long-term incentive program and sometimes are entered into to reflect changes in responsibilities or other special circumstances. Retention amounts are paid in cash provided the employee remains employed with the Company through the applicable vesting date. In most cases, the retention awards vest ratably over a three-year retention period. If the employee voluntarily terminates employment or is terminated by the Company for cause prior to the expiration date of the retention award, the employee will be required to repay any payments made under the agreement in the previous 12 months and will not be entitled to any other payments under the retention agreement. If an employee is terminated involuntarily without cause, any unpaid cash installments under the retention agreement will be forfeited. Any amounts paid to our named executive officers under a retention award during fiscal 2019 are shown in the Summary Compensation Table. The following chart summarizes the retention payments made during fiscal 2019 and scheduled future payments.

Name	Agreement Date	-----Payment Dates-----				
		Jun-'18	Jul-'18	Dec-'18	Jun-'19	Jul-'19
Steven Fisher	Jun-'16		240,000			
Devinder Ahuja	Jun-'16	67,000			67,000	
Nicholas Madden	Jul-'16			40,000		
	Jul-'16			40,000		
Marco Palmieri	Jun-'17		150,000			150,000
Leslie Parrette	Jul-'16			30,000		

Change in Control Severance. Each of our named executive officers is a participant in the Novelis Inc. Change in Control Severance Plan (the “CIC Plan”) with the exception of Mr. Madden, who is party to a Change in Control agreement with the Company. The Plan was adopted effective July 1, 2018 and replaced the individual agreements previously in place between the Company and our executives. Under the CIC Plan, the executive will be entitled to certain payments and benefits if the executive’s employment is terminated by the Company without cause, or by the executive for good reason, within three months before or 24 months following a change in control of the Company. The change in control severance payment under the CIC Plan is equal to 2.0 times the sum of the executive’s annual base salary and annual bonus and is paid payable in a lump sum within 30 days following an executive’s termination of employment. The CIC Plan also provides that the executive will receive (i) payment of the executive’s target short-term incentive (prorated, as applicable) for the year of termination; (ii) a payment to assist with post-employment medical coverage equal to 24 months of the full premium of the executive’s then-current level of coverage; (iii) continuation of coverage under the Company’s group life insurance plan for a period of 24 months; and (iv) 24 months of additional credit for benefit accrual or contribution purposes and accelerated vesting, if applicable, under our retirement plans. Mr. Madden’s Change in Control agreement provides similar benefits for a period of 12 months.

Severance Compensation Arrangements. We also have severance arrangements with our named executive officers, which provide that the executive will be entitled to certain payments and benefits if their employment is terminated by the Company without cause. Severance amounts are payable in a lump sum. Each agreement also contains a noncompetition and non-solicitation provision, which prohibits the executive from competing with us or soliciting our customers, suppliers or employees for a period of 18 months following termination (or 24 months in the case of Mr. Fisher). An executive may be required to sign a general release of claims against the Company as a condition to receiving the payments and benefits described above. See the Potential Payments Upon Termination or Change in Control table below for further information.

Compensation Risk Assessment

In fiscal 2019, the Committee reviewed the Company’s executive compensation policies and practices, and determined that the Company’s executive compensation programs are not reasonably likely to have a material adverse effect on the Company. Our compensation programs contain design features that mitigate the incentive for our employees, including named executive officers, to take unreasonable risks in managing the business, which include:

- An appropriate balance between short-term and long-term incentive compensation with multiple time horizons;
- Short-term incentives that provide for lower payouts for lower performance and higher payouts for higher performance;

- Short-term incentives that require minimum financial performance to achieve any payouts and also set capped maximum payouts at 200% of target;
- Short-term incentive payouts that are tied to multiple performance factors with no one performance factor having excessive weighting;
- Long-term incentives with multi-year vesting schedules, which reward employees for long-term performance;
- Goals that are not unreasonable and that are approved by the Committee on an annual basis and goals with no excessive payout opportunities at certain performance levels that may encourage short-term decisions and actions to meet payout thresholds;
- Oversight of the compensation programs by the Committee and multiple functions within the Company and at various levels within the functions to gain different viewpoints and prevent a small number of people to be exclusively involved in compensation decisions; and
- Advice from expert outside advisors regarding the design of the compensation program.

Based on its review, the Committee determined that the Company's compensation programs do not encourage excessive risk and instead encourage behaviors that support sustainable value creation.

Compensation Committee Report

The Committee has reviewed and discussed the foregoing Compensation Discussion and Analysis with management. Based on the Committee's review and discussions with management, the Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for fiscal 2019.

The foregoing report is provided by the following directors, who constitute the Committee:

Mr. Clarence J. Chandran, Chairman
Mr. Debnarayan Bhattacharya
Mr. Askaran Agarwala
Mr. Satish Pai

Summary Compensation Table

The table below sets forth information regarding compensation for our named executive officers for fiscal 2019 and the two prior fiscal years, as applicable. Any amounts paid to our named executive officers in a foreign currency are reflected in the table below and elsewhere in U.S. dollars as adjusted by the March 31, 2019 exchange rate.

Name	Fiscal Year	Salary (\$)	Bonus (\$)	Stock Awards (\$ (A))	Options Awards (\$ (A))	Non-Equity Incentive Plan Compensation (\$)	Change in Pension Value (\$)	All Other Compensation (\$ (G))	Total Compensation (\$)
Steven Fisher, President and Chief Executive Officer	2019	971,154	—	1,050,000	1,200,000	9,211,068 (B)	—	654,373	13,086,595
	2018	865,385	—	972,000	1,148,000	1,472,772	—	542,055 (H)	5,000,212
	2017	771,462	—	840,000	560,000	1,144,916	—	412,118	3,728,496
Devinder Ahuja, Senior Vice President, Chief Financial Officer	2019	562,692	—	204,000	136,000	1,163,812 (C)	—	276,992	2,343,496
	2018	514,231	429,292	150,000	100,000	607,005	—	239,872 (I)	2,040,400
	2017	334,615	350,000	121,500	81,000	390,978	—	279,047	1,557,140
Nicholas Madden, Senior Vice President, Manufacturing Excellence and Procurement	2019	420,399	—	198,000	132,000	2,483,981 (D)	198,205	101,002	3,540,127
Marco Palmieri, Senior Vice President, Novelis North America	2019	510,673	—	228,000	152,000	2,729,747 (E)	—	519,887	4,140,307
	2018	536,784	—	228,000	152,000	480,209	—	1,781,999 (J)	3,178,992
	2017	624,017	—	210,000	140,000	413,053	—	734,738	2,121,808
Leslie Parrette, Senior Vice President, General Counsel, Compliance Officer and Corporate Secretary	2019	583,396	—	225,000	150,000	2,901,817 (F)	—	241,588	4,101,801
	2018	567,176	—	210,000	140,000	638,770	—	259,612 (K)	1,815,558
	2017	551,888	—	210,000	140,000	563,426	—	202,678	1,667,992

(A) These amounts reflect Hindalco RSUs and Hindalco SARs granted under the 2019 LTIP.

(B) This amount includes the cash awards Mr. Fisher earned as follows: \$1,592,268 under the 2019 AIP, \$3,360,000 for the Novelis PUs granted in fiscal year 2017, and a one-time payment of \$4,258,800 for the 2017 LTIP Exchange.

(C) This amount includes the cash awards Mr. Ahuja earned as follows: \$677,812 under the 2019 AIP and \$486,000 for the Novelis PUs granted in fiscal year 2017.

(D) This amount includes the cash awards Mr. Madden earned as follows: \$363,341 under the 2019 AIP, \$792,000 for the Novelis PUs granted in fiscal year 2017, and a one-time payment of \$1,328,640 for the 2017 LTIP Exchange.

(E) This amount includes the cash awards Mr. Palmieri earned as follows: \$452,627 under the 2019 AIP, \$840,000 for the Novelis PUs granted in fiscal year 2017, and a one-time payment of \$1,437,120 for the 2017 LTIP Exchange.

(F) This amount includes the cash awards Mr. Parrette earned as follows: \$562,297 under the 2019 AIP, \$840,000 for the Novelis PUs granted in fiscal year 2017, and a one-time payment of \$1,499,520 for the 2017 LTIP Exchange.

(G) The amounts shown in this column reflect the values from the table below.

(H) \$133,593 has been added to reflect DC SERP contributions for the prior year.

(I) \$48,479 has been added to reflect DC SERP contributions for the prior year.

(J) \$52,751 has been added to reflect DC SERP contributions for the prior year.

(K) \$64,983 has been added to reflect DC SERP contributions for the prior year.

All Other Compensation Table

Name	Company Contribution to Defined Contribution Plans and Nonqualified Plans (\$)	Group Life Insurance (\$ (A))	Retention Payments (\$ (B))	Relocation, Assignee and Housing Related Payments (\$)	Other Perquisites and Personal Benefits (\$)	Total (\$)
Steven Fisher	345,951	5,261	240,000	—	63,161 (D)	654,373
Devinder Ahuja	157,526	3,043	67,000	—	49,423 (E)	276,992
Nicholas Madden	10,632	2,370	40,000	—	48,000 (E)	101,002
Marco Palmieri	132,324	2,865	190,000	132,652 (C)	62,046 (F)	519,887
Leslie Parrette	160,314	3,274	30,000	—	48,000 (E)	241,588

(A) This amount represents additional Company-paid life insurance for named executive officers beyond the regular employee coverage.

(B) These amounts represent payments pursuant to retention agreements as detailed above under Employee Related Agreements.

(C) This amount includes \$10,621 for expatriate expenses and \$122,031 related to tax payments for foreign assignment.

(D) This amount includes \$60,000 flex allowance and \$3,161 for an executive physical.

(E) This amount represents flex allowance.

(F) This amount includes \$50,000 flex allowance, \$8,750 for an auto lease and \$3,296 for an executive physical.

Grants of Plan-Based Awards in Fiscal 2019

The table below sets forth information regarding grants of plan-based awards made to our named executive officers during fiscal 2019 pursuant to our 2019 AIP and 2019 LTIP.

Name	Grant Date	Estimated Future Payout Under Non-Equity Incentive Plan Awards			All Other Stock Awards: Number of Shares or Stock Units	All Other Option Awards: Number of Securities Underlying Options	Award Type	Exercise or Base Price of Option Awards (\$/Sh)	Grant Date Fair Value of Stock and Option Awards (\$)
		Threshold (\$)	Target (\$)	Maximum (\$)					
Steven Fisher	5/2/2018	653,547	1,177,562	2,355,124	—	—	AIP	—	—
	5/2/2018	—	—	—	303,692	—	Hindalco RSU	—	1,050,000
	5/2/2018	—	—	—	—	820,512	Hindalco SAR	1.46	1,200,000
	5/2/2018	875,000	1,750,000	3,500,000	—	—	Novelis PU	—	—
Devinder Ahuja	5/2/2018	269,602	485,769	971,540	—	—	AIP	—	—
	5/2/2018	—	—	—	59,004	—	Hindalco RSU	—	204,000
	5/2/2018	—	—	—	—	92,992	Hindalco SAR	1.46	136,000
	5/2/2018	170,000	340,000	680,000	—	—	Novelis PU	—	—
Nicholas Madden	5/2/2018	152,521	274,813	549,627	—	—	AIP	—	—
	5/2/2018	—	—	—	57,268	—	Hindalco RSU	—	198,000
	5/2/2018	—	—	—	—	90,257	Hindalco SAR	1.46	132,000
	5/2/2018	165,000	330,000	660,000	—	—	Novelis PU	—	—
Marco Palmieri	5/2/2018	185,786	334,751	669,500	—	—	AIP	—	—
	5/2/2018	—	—	—	65,945	—	Hindalco RSU	—	228,000
	5/2/2018	—	—	—	—	103,932	Hindalco SAR	1.46	152,000
	5/2/2018	190,000	380,000	760,000	—	—	Novelis PU	—	—
Leslie Parrette	5/2/2018	228,570	411,838	823,676	—	—	AIP	—	—
	5/2/2018	—	—	—	65,077	—	Hindalco RSU	—	225,000
	5/2/2018	—	—	—	—	102,564	Hindalco SAR	1.46	150,000
	5/2/2018	187,500	375,000	750,000	—	—	Novelis PU	—	—

Outstanding Equity Awards as of March 31, 2019

Name	LTIP Year	Hindalco Options				Hindalco RSUs	
		Number of Securities Underlying Unexercised Options # Exercisable	Number of Securities Underlying Unexercised Options # Unexercisable	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested	Market Value of Shares or Units of Stock That Have Not Vested (\$)
Steven Fisher	2019	—	820,512	3.46	May 2, 2025	303,692	919,872
	2018	277,327	554,653	2.92	May 5, 2024	222,036	698,577
	2017	—	281,986	1.37	May 5, 2023	204,680	622,272
	2016	236,397	78,799	2.10	May 7, 2022	—	—
	2016	—	248,568	1.09	May 7, 2022	—	—
	2015	234,084	—	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
Devinder Ahuja	2019	—	92,992	3.46	May 2, 2025	59,004	178,721
	2018	24,158	48,315	2.92	May 5, 2024	34,265	107,806
	2017	24,663	24,663	2.26	Oct 1, 2023	17,901	54,425
Nicholas Madden	2019	—	90,257	3.46	May 2, 2025	57,268	173,463
	2018	31,888	63,776	2.92	May 5, 2024	45,230	142,304
	2017	—	66,468	1.37	May 5, 2023	48,245	146,675
	2016	—	54,745	2.10	May 7, 2022	—	—
	2015	20,000	—	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
Marco Palmieri	2019	—	103,932	3.46	May 2, 2025	65,945	199,745
	2018	36,720	73,438	2.92	May 5, 2024	52,082	163,862
	2017	—	70,497	1.37	May 5, 2023	51,169	155,565
	2016	58,062	58,063	2.10	May 7, 2022	—	—
	2015	44,751	—	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—
Leslie Parrette	2019	—	102,564	3.46	May 2, 2025	65,077	197,116
	2018	—	67,640	2.92	May 5, 2024	47,971	150,928
	2017	—	70,497	1.37	May 5, 2023	51,169	155,565
	2016	—	58,063	2.10	May 7, 2022	—	—
	2015	—	—	2.43	May 13, 2021	—	—
	2014	—	—	1.91	May 13, 2020	—	—
	2013	—	—	1.98	May 22, 2019	—	—

Option Exercises and Stock Vested in Fiscal Year 2019

The table below sets forth the information regarding stock options that were exercised during fiscal 2019 and stock awards that vested and were paid out during fiscal 2019.

Name	Options Awards		Stock Awards	
	Number of Shares Acquired on Exercise, but Settled in Cash	Value Realized on Exercise (\$)	Number of Shares Acquired on Vesting, but Settled in Cash	Value Realized on Vesting (\$)
Steven Fisher	530,555	908,751	691,517	2,394,935
Devinder Ahuja	—	—	35,035	125,897
Nicholas Madden	143,900	248,273	133,709	485,081
Marco Palmieri	70,497	140,000	143,869	522,018
Leslie Parrette	203,689	329,612	141,813	514,481

Pension Benefits in Fiscal 2019

The table below sets forth information regarding the present value as of March 31, 2019 of the accumulated benefits of our named executive officers under our defined benefit pension plans (both qualified and non-qualified). U.S. executives who were hired on or after January 1, 2005 are not eligible to participate in our defined benefit pension plans.

Name	Plan Name	Change in Pension Value (\$)	Number of Years of Credited Service	Present Value of Accumulated Benefit (\$)	Payments During Last Fiscal Year (\$)
Nicholas Madden	Novelis Pension Plan	60,540	12.5	741,591	—
	Novelis DB Serp Plan	137,665	12.5	1,847,084	—

U.S. based executives hired before January 1, 2005 participate in the Novelis Pension Plan and the Novelis Supplemental Executive Retirement Plan (Novelis DB SERP). The Novelis Pension Plan is a defined benefit pension plan based on a participant's average highest three years of earnings ("HAE") up to the IRS limit and years of service up to 35 years. The pension formula is generally equal to 45% of the participant HAE, plus 15% of any HAE over Social Security covered compensation. Benefits are payable at normal retirement (age 65) or early retirement (age 55 and 5 years of service or combined age and service equal to 75 or more). Early retirement benefits are reduced according to the plan's early retirement factors. For example, at age 62, a participant's early retirement benefit would be approximately 94% of the participant's normal retirement benefit. The Novelis DB SERP has the same formula as the Novelis Pension Plan, but only covers earnings in excess of the IRS compensation limit. The present value of the benefits shown above is calculated using interest and mortality specified under section 417(e) of the Internal Revenue Code.

Non-Qualified Deferred Compensation

This table summarizes contributions and earnings under our Defined Contribution Supplemental Executive Retirement Plan for fiscal year 2019. The plan is an unfunded, non-qualified defined contribution plan for U.S. tax purposes. The plan provides eligible executives with the opportunity to voluntarily defer, on a pretax basis, a portion of their base salary and annual incentive pay that otherwise may not be deferred under the Company's tax-qualified savings plan due to limitations under the U.S. Internal Revenue Code. The plan also provides eligible executives with Company non-elective and matching contribution credits which they are restricted from receiving under the tax-qualified savings plan due to those same limitations.

Name	Elective Contributions in Last Fiscal Year (\$)	Employer Contributions in Last Fiscal Year (\$)	Aggregate Earnings in Last Fiscal Year (\$)	Aggregate Withdrawals/Distributions (\$)	Aggregate Balance at Last Fiscal Year End (\$)
Steven Fisher	—	158,634	2,069	—	1,584,270
Devinder Ahuja	—	65,043	465	—	116,760
Nicholas Madden	—	(A)	—	—	71,472
Marco Palmieri	—	52,935	—	—	107,759
Leslie Parrette	—	66,907	11,479	—	599,987

(A) Mr. Madden is not eligible to receive employer contributions to our Defined Contribution Supplemental Executive Retirement Plan because he participates in our traditional pension plan.

Potential Payments Upon Termination or Change in Control

This section provides an estimate of the payments and benefits that would be paid to certain of our named executive officers on March 31, 2019, upon voluntary termination or involuntary termination of employment without cause. This section, however, does not reflect any payments or benefits that would be paid to our salaried employees generally, including for example accrued salary and vacation pay; regular retirement plan benefits; or normal retirement, death or disability benefits. See Employment Related Agreements above for a discussion of the change in control, severance compensation and retention agreements for our named executive officers and any restrictive covenants contained therein.

Name	Type of Payment	Voluntary Termination by Executive (\$)	Termination by us without Cause (\$)	Termination in Connection with CIC by us without Cause or by Executive for Good Reason (\$)	Death or Disability (\$)
Steven Fisher	Short-Term Incentive Pay (A)	1,592,268	1,592,268	1,592,268	1,592,268
	Long-Term Incentive Plan (B)	535,477	11,572,137	12,126,256	12,126,256
	Severance (C)	—	3,000,000	4,400,000	—
	Retirement plans (D)	—	345,951	691,902	—
	Lump sum cash payment for continuation of health coverage (E)	—	39,184	47,021	—
	Continued group life insurance coverage (F)	—	5,261	10,523	—
	Total	2,127,745	16,554,801	18,867,970	13,718,524
Devinder Ahuja	Short-Term Incentive Pay (A)	677,812	677,812	677,812	677,812
	Long-Term Incentive Plan (B)	24,689	884,190	994,708	994,708
	Severance (C)	—	1,320,000	2,146,000	—
	Retirement plans (D)	—	157,526	315,052	—
	Lump sum cash payment for continuation of health coverage (E)	—	39,184	47,021	—
	Continued group life insurance coverage (F)	—	3,043	6,086	—
	Total	702,501	3,081,755	4,186,679	1,672,520
Nicholas Madden	Short-Term Incentive Pay (A)	363,341	363,341	363,341	363,341
	Long-Term Incentive Plan (B)	26,252	2,809,855	2,929,766	2,929,766
	Severance (C)	—	422,790	1,395,207	—
	Retirement plans (D)	—	165,578	165,578	—
	Lump sum cash payment for continuation of health coverage (E)	—	39,184	39,184	—
	Continued group life insurance coverage (F)	—	2,370	2,370	—
	Total	389,593	3,803,118	4,895,446	3,293,107
Marco Palmieri	Short-Term Incentive Pay (A)	452,627	452,627	452,627	452,627
	Long-Term Incentive Plan (B)	112,270	3,134,776	3,271,333	3,271,333
	Severance (C)	—	1,237,500	1,699,500	—
	Retirement plans (D)	—	132,324	264,648	—
	Lump sum cash payment for continuation of health coverage (E)	—	39,184	47,021	—
	Continued group life insurance coverage (F)	—	2,865	5,731	—
	Total	564,897	4,999,276	5,740,860	3,723,960
Leslie Parrette	Short-Term Incentive Pay (A)	562,297	562,297	562,297	562,297
	Long-Term Incentive Plan (B)	—	3,049,788	3,181,977	3,181,977
	Severance (C)	—	882,510	2,000,356	—
	Retirement plans (D)	—	160,314	320,629	—
	Lump sum cash payment for continuation of health coverage (E)	—	9,871	11,845	—
	Continued group life insurance coverage (F)	—	3,274	6,549	—
	Total	562,297	4,668,054	6,083,653	3,744,274

(A) These amounts represent the executive's AIP for the fiscal year.

(B) These amounts reflect the estimated value of the vested SARs, RSUs and PUs granted pursuant to our long term incentive plans.

(C) These amounts would be paid pursuant to the executive's severance agreement, Mr. Madden's Change in Control agreement or our Change in Control Severance Plan for all other executives, as applicable.

- (D) The retirement benefit represents 12 months (or 24 months in the case of a change in control severance for all executives except Mr. Madden) of additional benefit accrual or contribution credit, as applicable, under our retirement plans.
- (E) This amount is intended to assist the executive in paying post-employment health coverage for 12 months (or 24 months in the case of a change in control severance for all executives except Mr. Madden).
- (F) This amount represents the estimated value of 12 months (or 24 months in the case of a change in control severance for all executives except Mr. Madden) of additional coverage under our group and executive life insurance plans.

Director Compensation for Fiscal 2019

The Chairman of our board of directors is entitled to receive cash compensation equal to \$250,000 per year, and the Chair of our Audit Committee is entitled to receive \$175,000 per year. Each of our other directors is entitled to receive compensation equal to \$150,000 per year, plus an additional \$5,000 if he is a member of our Audit Committee. Directors' fees are ordinarily paid in quarterly installments. Since July 2008, our Chairman, Mr. Birla, has declined to receive the director compensation to which he is entitled.

All directors receive reimbursement for out of pocket expenses associated with attending board and Committee meetings. The table below sets forth the total compensation received by our directors for fiscal 2019.

Name	Fees Earned or Paid in Cash (\$)
Kumar Mangalam Birla	—
Askaran K. Agarwala	150,000
D. Bhattacharya	155,000
Clarence J. Chandran	155,000
Satish Pai	150,000
Donald A. Stewart	175,000

Compensation Committee Interlocks and Insider Participation

In fiscal 2019, Clarence J. Chandran was the Chairman of the Committee. The other Committee members during all or part of the year were Mr. D. Bhattacharya, Mr. Askaran Agarwala and Mr. Satish Pai. During fiscal 2019, none of our executive officers served as:

- a member of the Committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served on our Committee;
- a director of another entity, one of whose executive officers served on our Committee; or
- a member of the Committee (or other board committee performing equivalent functions or, in the absence of any such committee, the entire board of directors) of another entity, one of whose executive officers served as one of our directors.

Fiscal Year 2020 Incentive Compensation Plans

On May 6, 2019, our board of directors approved our fiscal 2020 Annual Incentive Plan (2020 Executive AIP) and a long term incentive plan covering fiscal years 2020 through 2022 (2020 Executive LTIP). The target amounts under each plan for our named executive officers are as follows:

Name	2020 Executive AIP Target (as % of base salary)	2019 Executive LTIP Target Awarded May 6, 2019 (\$)
Steven Fisher	130%	5,300,000
Devinder Ahuja	85%	1,000,000
Nicholas Madden	65%	—
Marco Palmieri	65%	760,000
Leslie Parrette	70%	750,000

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Shareholder Matters*

On May 15, 2007, the Company was acquired by Hindalco through its indirect wholly-owned subsidiary AV Metals Inc. pursuant to a plan of arrangement entered into on February 10, 2007. Since the acquisition was completed on May 15, 2007, all of our common shares have been indirectly held by Hindalco.

Item 13. *Certain Relationships and Related Transactions and Director Independence*

We maintain various policies and procedures that govern related party transactions. Pursuant to our Code of Conduct and our Code of Ethics for Senior Financial Officers, senior managers and directors of the company (a) must avoid any action that creates or appears to create, a conflict of interest between their own interest and the interest of the company, (b) cannot usurp corporate opportunities, and (c) must deal fairly with third parties. This policy is available on our website at www.novelis.com. In addition, we have enacted procedures to monitor related party transactions by (x) identifying possible related parties through questions in our director and officer questionnaires, (y) determining whether we receive payments from or make payments to any of the identified related parties, and (z) if we determine payments are made or received, researching the nature of the interactions between the company and the related parties and ensuring that the related person does not have an interest in the transaction with the company. The Audit Committee is responsible for reviewing material related party transactions that involve the company, one of our directors or executive officers or any of their immediate family members.

See Note 9 — Investment in and Advances to Non-Consolidated Affiliates and Related Party Transactions for more details related to various transactions with our parent company, Hindalco, and its affiliates. These transactions are not material to Novelis individually or in the aggregate. Because of the relationship four of our directors have with Hindalco, we consider these transactions to be related party.

Item 14. Principal Accountant Fees and Services

The following table shows fees and expenses billed to the Company by PricewaterhouseCoopers LLP for services rendered for the years ended March 31, 2019 and 2018:

	March 31,	
	2019	2018
Audit fees (A)	\$ 6,116,502	\$ 6,688,850
Audit-Related Fees (B)	65,180	1,881,500
Tax Fees (C)	465,505	88,545
All Other Fees (D)	147,622	143,978
Total	\$ 6,794,809	\$ 8,802,873

- (A) Represent fees for professional services rendered and expenses incurred for the audit of the Company's annual financial statements, review of financial statements included in the Company's Form 10-Qs and services that are normally provided by PricewaterhouseCoopers LLP in connection with statutory and regulatory filings or engagements for those fiscal periods.
- (B) Represent fees for assurance related services that are reasonably related to the performance of the audit or review of our consolidated financial statements and are not reported under "Audit Fees." In the fiscal year ended March 31, 2019, this fee includes consultations on accounting and disclosure matters. In the fiscal year ended March 31, 2018, this fee includes consultation on accounting and disclosure matters and due diligence procedures performed. Note that the nature of such advice did not result in the principal auditor firm acting in a management function or providing services that were considered book-keeping in nature.
- (C) In fiscal 2019, this fee includes procedures performed related to transfer pricing studies, customs valuations audits, and tax consulting services. In the fiscal year ended March 31, 2018, this fee includes procedures performed related to transfer pricing studies.
- (D) In fiscal 2019, this fee includes attest services performed over the Company's application for energy credits, as well as for services not included in the Audit, Audit Related, and Tax categories. In the fiscal year ended March 31, 2018, this fee includes attest services performed over the Company's application for energy credits and certain agreed upon procedures work.

Pre-Approval of Audit and Permissible Non-Audit Services

The charter of the Audit Committee provides that the Committee is responsible for the pre-approval of all audit and permissible non-audit services to be performed by the independent auditors. The Audit Committee has adopted a policy for the pre-approval of services provided by the independent auditors. The policy gives detailed guidance to management as to the specific services that are eligible for general pre-approval and provides specific cost limits for certain services on an annual basis. Pursuant to the policy and the Audit Committee charter, the Audit Committee has granted to its chairman the authority to address any requests for pre-approval of individual services.

PART IV

Item 15. Exhibits and Financial Statement Schedules

1. Financial Statement Schedules

None.

2. Exhibits

<u>Exhibit No.</u>	<u>Description</u>
2.1	<u>Arrangement Agreement by and among Hindalco Industries Limited, AV Aluminum Inc. and Novelis Inc., dated as of February 10, 2007 (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on February 13, 2007 (File No. 001-32312)).</u>
2.2	<u>Agreement and Plan of Merger, dated as of July 26, 2018, among Novelis Inc., Novelis Acquisitions LLC, Aleris Corporation and OCM Opportunities ALS Holdings L.P. (incorporated by reference to Exhibit 2.1 to our Current Report on Form 8-K filed on July 26, 2018 (File No. 001-32312)).</u>
3.1	<u>Restated Certificate and Articles of Incorporation of Novelis Inc. (incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K filed on January 7, 2005 (File No. 001-32312)).</u>
3.2	<u>Certificate and Articles of Amalgamation of Novelis Inc., dated March 31, 2016 (incorporated by reference to Exhibit 3.2 to our Annual Report on Form 10-K filed May 10, 2016 (File No. 001-32312)).</u>
3.3	<u>Novelis Inc. Amended and Restated Bylaws, adopted as of July 24, 2008 (incorporated by reference to Exhibit 3.2 to our Current Report on Form 8-K filed on July 25, 2008 (File No. 001-32312)).</u>
4.1	<u>Specimen Certificate of Novelis Inc. Common Shares (incorporated by reference to Exhibit 4.2 to our Registration Statement on Form 10-12B filed on December 27, 2004 (File No. 001-32312)).</u>
4.2	<u>Indenture relating to the 6.25% Senior Notes due 2024, dated August 29, 2016, between Novelis Corporation, as issuer, Novelis Inc., as guarantor, the subsidiary guarantors named on the signature pages thereto and Regions Bank, as trustee (incorporated by reference to Exhibit 4.3 to our Current Report on Form 8-K filed on September 19, 2016 (File No. 001-32312)).</u>
4.3	<u>Indenture relating to the 5.875% Senior Notes due 2026, dated September 14, 2016, between Novelis Corporation, as issuer, Novelis Inc., as guarantor, the subsidiary guarantors named on the signature page thereto and Regions Bank, as trustee (incorporated by reference to Exhibit 4.1 to our Current Report on Form 8-K filed on September 19, 2016 (File No. 001-32312)).</u>
10.1	<u>Short Term Credit Agreement dated as of December 18, 2018, among Novelis Acquisitions LLC, Novelis Inc., AV Metals Inc., the other Guarantors thereto, the Lenders party thereto, Standard Chartered Bank, the Lead Arrangers and Bookrunners and Documentation Agents (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed on February 5, 2019 (File No. 001-32312)).</u>
10.2	<u>Increase Joinder Amendment to Credit Agreement dated as of December 18, 2018, between Novelis Acquisitions LLC, AV Metals Inc., the Other Loan Parties thereto, the Third Party Security Provider, Standard Chartered Bank, the Mandated Lead Arrangers and Bookrunners, and the Lenders signatory thereto (incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q filed on February 5, 2019 (File No. 001-32312)).</u>

10.3	<u>Amendment No. 2 to Credit Agreement and Amendment to U.S. Security Agreement, dated as of November 20, 2018, between Novelis Inc., AV Metals Inc., the Other Loan Parties Party thereto, the Third Party Security Provider, and Standard Chartered Bank (incorporated by reference to Exhibit 10.3 to our Quarterly Report on Form 10-Q filed on February 5, 2019 (File No. 001-32312)).</u>
10.4	<u>Amendment No. 2 to Second Amended and Restated Credit Agreement and Amendment to U.S. Security Agreement dated as of April 15, 2019 among Novelis Inc., Novelis Corporation, the other Borrowers party thereto, AV Metals Inc., the other Guarantors party thereto, the Third Party Security Provider, the Lenders party thereto, Wells Fargo Bank, National Association, Wells Fargo Bank, N.A., the Issuing Banks Party thereto, the Co-Syndication Agents and the Joint Lead Arrangers and Joint Bookmanagers</u>
10.5*	<u>Novelis Inc. Change in Control Severance Plan</u>
10.6*	<u>Form of Indemnity Agreement between Novelis Inc. and Members of the Board of Directors of Novelis Inc. (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K filed on May 21, 2007 (File No. 001-32312)).</u>
10.7*	<u>Form of Severance Agreement (incorporated by reference to Exhibit 10.4 to our Current Report on Form 8-K filed on July 1, 2009 (File No. 001-32312)).</u>
10.8*	<u>Novelis Inc. Fiscal Year 2014 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.42 to our Annual Report on Form 10-K filed on May 15, 2013 (File No. 001-32312)).</u>
10.9*	<u>Novelis Inc. Fiscal Year 2015 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.30 to our Annual Report on Form 10-K filed on May 16, 2014 (File No. 001-32312)).</u>
10.10*	<u>Novelis Inc. Fiscal Year 2016 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.31 to our Annual Report on Form 10-K filed on May 12, 2015 (File No. 001-32312)).</u>
10.11*	<u>Novelis Inc. Fiscal Year 2017 Executive Long-Term Incentive Plan (incorporated by reference to Exhibit 10.27 to our Annual Report on Form 10-K filed May 10, 2016 (File No. 001-32312)).</u>
10.12*	<u>Novelis Inc. Fiscal Year 2018 Executive Long Term Incentive Plan (incorporated by reference to Exhibit 10.14 to our Annual Report on Form 10-K filed on May 10, 2017 (File No. 001-32312)).</u>
10.13*	<u>Novelis Inc. Fiscal Year 2019 Executive Long Term Incentive Plan (incorporated by reference to Exhibit 10.13 to our Annual Report on Form 10-K filed on May 8, 2018 (File No. 001-32312)).</u>
10.14*	<u>Novelis Inc. Fiscal Year 2020 Executive Long Term Incentive Plan</u>
10.15*	<u>Novelis Inc. Fiscal Year 2019 Executive Annual Incentive Plan (incorporated by reference to Exhibit 10.12 to our Annual Report on Form 10-K filed on May 8, 2018 (File No. 001-32312)).</u>
10.16*	<u>Novelis Inc. Fiscal Year 2020 Executive Annual Incentive Plan</u>
10.17*	<u>Novelis Supplementary Pension Plan dated January 1, 2012 ((incorporated by reference to Exhibit 10.31 to our Annual Report on Form 10-K filed on May 24, 2012 (File No. 001-32312)).</u>

10.18*	<u>Employment Agreement between Novelis Inc. and Steven Fisher dated August 10, 2015 (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed on November 9, 2015 (File No. 001-32312))</u>
10.19*	<u>Employment Agreement between Novelis Inc. and Antonio Tadeu Coelho Nardocci dated September 4, 2009 (incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K/A filed on September 9, 2009 (File No. 001-32312))</u>
10.20*	<u>Employment Agreement between Novelis Inc. and Devinder Ahuja, dated as of June 6, 2016 (incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q filed on August 5, 2016 (File No. 001-32312))</u>
10.21*	<u>Employment Agreement between Novelis Inc. and Nicholas Madden, dated August 22, 2006</u>
10.22*	<u>Employment Agreement between Novelis Inc. and Marco Antonio Palmieri dated June 16, 2017 (incorporated by reference to Exhibit 10.19 to our Annual Report on Form 10-K filed on May 8, 2018 (File No. 001-32312))</u>
10.23*	<u>Employment Agreement between Novelis Inc. and Sachin Satpute dated as of April 28, 2016 (incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q filed on August 5, 2016 (File No. 001-32312))</u>
10.24*	<u>Employment Agreement between Novelis Inc. and Leslie J. Parrette, Jr., dated September 21, 2009 ((incorporated by reference to Exhibit 10.46 to our Annual Report on Form 10-K filed on May 12, 2015 (File No. 001-32312))</u>
10.25*	<u>Retention Award Letter to Nicholas Madden dated July 29, 2016</u>
10.26*	<u>Retention Award Letter to Steven Fisher dated June 2016 (incorporated by reference to Exhibit 10.34 to our Annual Report on Form 10-K filed on May 10, 2017 (File No. 001-32312))</u>
10.27*	<u>Retention Award Letter to Leslie J. Parrette, Jr. dated July 29, 2016 (incorporated by reference to Exhibit 10.37 to our Annual Report on Form 10-K filed on May 10, 2017 (File No. 001-32312))</u>
10.28*	<u>Retention Award Letter to Marco Palmieri dated July 29, 2016 (incorporated by reference to Exhibit 10.38 to our Annual Report on Form 10-K filed on May 10, 2017 (File No. 001-32312))</u>
10.29*	<u>Retention Award Letter to Marco Palmieri dated June 16, 2017 (incorporated by reference to Exhibit 10.32 to our Annual Report on Form 10-K filed on May 8, 2018 (File No. 001-32312))</u>
10.30*	<u>Change In Control Agreement between the Company and Nicholas Madden dated April 1, 2016</u>
10.31*	<u>Amendment to Extend Change in Control Agreement between the Company and Nicholas Madden dated July 1, 2018</u>
21.1	<u>List of Subsidiaries of Novelis Inc.</u>
31.1	<u>Section 302 Certification of Principal Executive Officer</u>
31.2	<u>Section 302 Certification of Principal Financial Officer</u>

32.1	Section 906 Certification of Principal Executive Officer
32.2	Section 906 Certification of Principal Financial Officer
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

* Indicates a management contract or compensatory plan or arrangement.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

NOVELIS INC.

By: /s/ Steven Fisher

Name: Steven Fisher

Title: President and Chief Executive Officer

Date: May 8, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>/s/ Steven Fisher</u> Steven Fisher	(Principal Executive Officer)	Date: May 8, 2019
<u>/s/ Devinder Ahuja</u> Devinder Ahuja	(Principal Financial Officer)	Date: May 8, 2019
<u>/s/ Stephanie Rauls</u> Stephanie Rauls	(Principal Accounting Officer)	Date: May 8, 2019
<u>/s/ Kumar Mangalam Birla</u> Kumar Mangalam Birla	(Chairman of the Board of Directors)	Date: May 8, 2019
<u>/s/ Askaran Agarwala</u> Askaran Agarwala	(Director)	Date: May 8, 2019
<u>/s/ Debnarayan Bhattacharya</u> Debnarayan Bhattacharya	(Director)	Date: May 8, 2019
<u>/s/ Clarence J. Chandran</u> Clarence J. Chandran	(Director)	Date: May 8, 2019
<u>/s/ Donald A. Stewart</u> Donald A. Stewart	(Director)	Date: May 8, 2019
<u>/s/ Satish Pai</u> Satish Pai	(Director)	Date: May 8, 2019

Item 16. *Form 10-K Summary*

None.

EXECUTION VERSION

**AMENDMENT NO. 2 TO
SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND
AMENDMENT TO U.S. SECURITY AGREEMENT**

dated as of April 15, 2019

among

**NOVELIS INC., as Canadian Borrower,
NOVELIS CORPORATION as a U.S. Borrower,
THE OTHER U.S. SUBSIDIARIES OF CANADIAN BORROWER
PARTY HERETO AS U.S. BORROWERS, NOVELIS UK LTD, as a U.K. Borrower, NOVELIS AG,
as a Swiss Borrower,
NOVELIS DEUTSCHLAND GMBH,
as a German Borrower, AV METALS INC.,
THE OTHER GUARANTORS PARTY HERETO,
THE THIRD PARTY SECURITY PROVIDER,
THE LENDERS PARTY HERETO,
WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Administrative Agent, Collateral Agent, and U.S. Swingline Lender,
WELLS FARGO BANK, N.A. (LONDON BRANCH), as European Swingline Lender, and
THE ISSUING BANKS PARTY THERETO.**

**MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED, CITIBANK, N.A.,
DEUTSCHE BANK SECURITIES INC., and
JPMORGAN CHASE BANK, N.A., as Co-Syndication Agents.
WELLS FARGO BANK, NATIONAL ASSOCIATION,
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED, CITIBANK, N.A.,
DEUTSCHE BANK SECURITIES INC., and JPMORGAN CHASE BANK, N.A.,
as Joint Lead Arrangers and Joint Bookmanagers.**

This **AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT AND AMENDMENT TO U.S. SECURITY AGREEMENT** (this

“Amendment”), dated as of April 15, 2019, is entered into among NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act and having its corporate office at Two Alliance Center, 3560 Lenox Road, Suite 2000, Atlanta, GA 30326, USA (the **“Canadian Borrower”**), NOVELIS CORPORATION, as a U.S. borrower, the other U.S. borrowers party thereto (collectively, the **“U.S. Borrowers”**), NOVELIS UK LTD, as a U.K. borrower (**“Novelis UK”**), NOVELIS AG, as a Swiss borrower (**“Novelis AG”**), NOVELIS DEUTSCHLAND GMBH, as a German borrower (**“Novelis Deutschland”**), AV METALS INC., a corporation formed under the Canada Business Corporations Act (**“Holdings”**), the other LOAN PARTIES (as defined in the Amended Credit Agreement referred to below), NOVELIS ITALIA S.P.A. (the **“Third Party Security Provider”**), the LENDERS party hereto, each ISSUING BANK party hereto, and WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, and together with its successors in such capacity, **“Administrative Agent”**), as collateral agent (in such capacity, and together with its successors in such capacity, **“Collateral Agent”**), and as U.S. swingline lender (in such capacity, and together with its successors in such capacity, **“U.S. Swingline Lender”**), and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, and together with its successors in such capacity, **“European Swingline Lender”**).

RECITALS

WHEREAS, the Borrowers, Holdings, the other Loan Parties, the Administrative Agent, the Collateral Agent, the U.S. Swingline Lender, the European Swingline Lender, the Issuing Banks, the lenders party thereto immediately prior to the Amendment Effective Date (as defined below) (the **“Existing Lenders”**), and the other parties from time to time party thereto, entered into that certain Second Amended and Restated Credit Agreement, dated as of October 6, 2014 (the **“Existing Credit Agreement”**), and the Existing Credit Agreement, as amended, supplemented, restated or otherwise modified prior to the date hereof, the **“Credit Agreement”**, and as amended by this Amendment, the **“Amended Credit Agreement”**);

WHEREAS, the Third Party Security Provider has pledged certain assets to secure the Secured Obligations of the Loan Parties;

WHEREAS, the Canadian Borrower has requested that the Credit Agreement be amended as herein set forth in order to, among other things, (i) provide for \$500,000,000 of incremental commitments that shall be effective as of the Amendment Effective Date, with such commitments becoming available upon the earlier to occur of the Aleris Acquisition Closing Date and the date that is 6 months after the Amendment Effective Date, subject to the satisfaction of certain conditions set forth herein, (ii) permit the Aleris Acquisition, the Permitted Reorganization, and the Permitted Aleris Foreign Subsidiary Transfers, and (iii) extend the maturity date of the Credit Agreement from September 14, 2022 to five years after the Amendment Effective Date;

WHEREAS, the U.S. Borrowers and the other Guarantors party to the U.S. Security Agreement (collectively, the “**Reaffirming Parties**”, and each, a “**Reaffirming Party**”) have entered into or joined the U.S. Security Agreement in order to induce the Lenders to make Loans, and each Reaffirming Party desires to reaffirm the security interest granted pursuant to the U.S. Security Agreement;

WHEREAS, the Loan Parties hereby request that the Existing Aleris Issuing Banks (as defined below), agree to become Issuing Banks hereunder in respect of Existing Aleris Letters of Credit as more fully set forth herein and in the Amended Credit Agreement;

WHEREAS, the Reaffirming Parties expect to realize, or have realized, substantial direct and indirect benefits as a result of this Amendment becoming effective and the consummation of the transactions contemplated hereby; and

WHEREAS, the Borrowers, Holdings, the other Loan Parties, the Administrative Agent, the Collateral Agent, the U.S. Swingline Lender, the European Swingline Lender, each Existing Lender party hereto, and each other bank or financial institution signatory hereto as a lender and listed on Annex I hereto (the “**New Lenders**” and, collectively with the Existing Lenders party hereto, the “**Lenders**”), and each Issuing Bank, have agreed to amend the Credit Agreement on the terms and subject to the conditions herein provided.

NOW, THEREFORE, in consideration of the foregoing, the mutual covenants and obligations herein set forth and other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, and in reliance upon the representations, warranties and covenants herein contained, the parties hereto, intending to be legally bound, hereby agree as follows:

Section 1. Definitions. Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Amended Credit Agreement.

Section 2. Revolving Commitments; Lenders; Issuing Banks.

(a) Subject to the terms and conditions set forth herein, effective as of the Amendment Effective Date, immediately prior to giving effect to Sections 4 and 5:

(i) the Revolving Commitment of each Existing Lender under the Credit Agreement shall be adjusted as necessary such that the Revolving Commitment (for the avoidance of doubt, without regard to the Specified Incremental Commitment) of such Existing Lender and of each New Lender under the Amended Credit Agreement shall be as set forth on Annex I hereto under the heading “Revolving Commitment”;

(ii) each of the Lenders party hereto hereby waives advance notice of any termination or reduction (including in accordance with Section 11.02(d) of the Credit Agreement) of its Revolving Commitment in connection therewith; provided that notice thereof is provided on or prior to the Amendment Effective Date;

(iii) the Revolving Exposure and other exposures under or in connection with the Revolving Commitments of each Existing Lender (as in effect immediately prior to giving effect to this Amendment) shall, as of the Amendment Effective Date, automatically be reallocated and assigned (including in accordance with Section 11.02(d) of the Credit Agreement) from the Existing Lenders to and among the Lenders (including, for avoidance of doubt, the New Lenders), and settled by the Administrative Agent, the Lenders, and the Existing Lenders that are not Lenders party to this Amendment as necessary, in each case in accordance with each such Person's adjusted shares of such commitments (including, in the case of the Existing Lenders that are not Lenders party to this Amendment, the payment of its Revolving Percentage (as in effect immediately prior to giving effect to this Amendment) of the outstanding principal amount of the Loans, and all accrued and unpaid interest and fees in connection therewith); and

(iv) after giving effect to the foregoing, the "Commitment" and the "Revolving Commitment" of each Existing Lender that is not a Lender party to this Amendment shall terminate, and each such Existing Lender shall cease to be a Lender under the Credit Agreement and the Amended Credit Agreement for all purposes.

Notwithstanding anything to the contrary in any Loan Document, each Lender party to this Amendment consents to the non-pro rata payments required to effect the provisions of this Section 2. This Amendment shall constitute an Assignment and Assumption for purposes of the Credit Agreement, the Amended Credit Agreement, and the other Loan Documents.

(b) Subject to the terms and conditions set forth herein, effective as of the Amendment Effective Date, concurrently with the effectiveness of the terms of Section 4 and the amendments described in Section 5:

(i) Each of Bank of America, N.A., Deutsche Bank AG New York Branch, JPMorgan Chase Bank, N.A., and J.P. Morgan Europe Limited in their respective capacities as issuers of letters of credit under the Existing Aleris Credit Agreement (each, an "**Existing Aleris Issuing Bank**"), hereby agrees that, on the Aleris Acquisition Closing Date, automatically upon giving effect to the Aleris Acquisition, to the extent that such Existing Aleris Issuing Bank is an issuer of any Existing Aleris Letters of Credit, such Existing Aleris Issuing Bank hereby agrees that it shall be an Issuing Bank with respect to the Existing Aleris Letters of Credit for all purposes under the Amended Credit Agreement and the other Loan Documents, and agrees to be bound by the terms and conditions of all Loan Documents in such capacity (the Existing Aleris Issuing Banks, in the capacities set forth in this clause (b)(i), "**Aleris Issuing Banks**"), and that, to the extent that the requirements set forth in Section 2.18(f) are satisfied on the Aleris Acquisition Closing Date, all of such Existing Aleris Issuing Bank's Existing Aleris Letters of Credit shall constitute Letters of Credit for all purposes under the Amended Credit Agreement and the other Loan Documents.

(ii) Notwithstanding the foregoing, JPMorgan Chase Bank, N.A. and J.P. Morgan Europe Limited, in their respective capacities as Aleris Issuing Banks, shall be Issuing Banks solely for purposes of the Existing Aleris Letters of Credit for which either JPMorgan Chase Bank or N.A. and J.P. Morgan Europe Limited is an issuer on the Aleris

Acquisition Closing Date, it being understood that neither JPMorgan Chase Bank, N.A. nor J.P. Morgan Europe Limited shall extend, renew, amend, increase or otherwise modify any such Existing Aleris Letter of Credit, and no Loan Party shall be permitted to request the same, and that upon the termination, cancellation or replacement of all Existing Aleris Letters of Credit issued by such Aleris Issuing Bank, JPMorgan Chase Bank, N.A. and J.P. Morgan Europe Limited shall cease to be Aleris Issuing Banks for all purposes hereof other than as it relates to any expense reimbursement, fees and indemnification provisions applicable to Issuing Banks that survive the resignation of an Issuing Bank under the Loan Documents.

(iii) Each Loan Party and each Agent, Lender and Issuing Bank party to this Amendment hereby consents to the terms of this clause (b).

(iv) The Loan Parties, JPMorgan Chase Bank, N.A. and J.P. Morgan Europe Limited hereby agree to execute and deliver all such documentation and other agreements as are reasonably requested by the Administrative Agent or any Issuing Bank (including any Aleris Issuing Bank) to evidence the terms of this clause (b) and/or any release or termination effected pursuant to this clause (b).

Section 3. Lender Agreements.

(a) Each of the Lenders:

(i) confirms that it has received a copy of the Credit Agreement the Amended Credit Agreement, and the other Loan Documents, together with copies of such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Amendment;

(ii) agrees that it will, independently and without reliance upon any Agent, any Issuing Bank or any other Lender and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Credit Agreement or the Amended Credit Agreement;

(iii) appoints and authorizes each Agent to take such action as agent on its behalf and to exercise such powers under the Credit Agreement, the Amended Credit Agreement and the other Loan Documents as are delegated to such Agent by the terms hereof and thereof, together with such powers as are reasonably incidental thereto;

(iv) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Credit Agreement or the Amended Credit Agreement are required to be performed by it as a Lender; and

(v) authorizes the Administrative Agent and the Collateral Agent, without the further consent of any other Person, to negotiate, execute and deliver an amendment to, or an amendment and restatement of, the Intercreditor Agreement, to give effect to each step of the Permitted Reorganization or to conform defined terms in the Intercreditor Agreement to defined terms in, and Secured Obligations under, the Amended Credit Agreement.

(b) Each New Lender acknowledges and agrees that, upon its execution of this Amendment and upon the assignments effected pursuant to Section 2, such New Lender shall become a “Lender” under, and for all purposes of, the Credit Agreement, the Amended Credit Agreement and the other Loan Documents, and shall be subject to and bound by the terms hereof and thereof, and shall perform all the obligations of and shall have all rights of a Lender hereunder and thereunder.

(c) The Loan Parties, the Agents, the Lenders, the U.S. Swingline Lender, the European Swingline Lender, and the Issuing Banks each, by their execution and delivery of this Amendment and in reliance upon the representations and warranties in this Section 3, consents to each New Lender becoming a “Lender” pursuant to Section 2 under, and for all purposes of, the Credit Agreement, the Amended Credit Agreement, and the other Loan Documents.

(d) By its execution of this Amendment, each New Lender represents and warrants that it meets all the requirements to be an assignee under Section 11.04 of the Credit Agreement (subject to such consents, if any, as may be required thereunder).

(e) For each Lender, delivered herewith to the Designated Company and the Administrative Agent are such forms, certificates or other evidence with respect to Tax withholding matters as such Lender may be required to deliver to the Designated Company and the Administrative Agent pursuant to Section 2.15 of the Credit Agreement, and a certification as to whether such Lender is or is not a Swiss Qualifying Bank.

(f) Each Lender hereby expressly consents to, ratifies (*genehmigt*) and confirms the declarations and acts made by the Collateral Agent on behalf of and in the name of the Assignee as Future Pledgee (as defined in the relevant German Security Agreement) in the German Security Agreements. Each Lender confirms that it is aware of the contents of the German Security Agreements.

Section 4. Specified Incremental Commitments.

(a) On the Amendment Effective Date (as defined below), concurrently with the effectiveness of the amendments described in Section 5, in addition to its Revolving Commitment, each Lender hereby commits under the Amended Credit Agreement to provide its respective commitment as set forth on Annex I hereto under the heading “Specified Incremental Commitment”, in an aggregate amount for all such Lenders as of the Amendment Effective Date equal to \$500,000,000 (the “**Specified Incremental Commitments**”); provided that if the Specified Incremental Commitment Availability Date does not occur on or prior to the date that is 6 months after the Amendment No. 2 Effective Date, the Specified Incremental Commitments shall be deemed to be zero for all purposes under the Loan Documents.

(b) The Specified Incremental Commitments shall have the same terms as the Revolving Commitments; provided that, prior to the Specified Incremental Commitment Availability Date, (i) no Commitment Fees shall accrue in respect of the Specified Incremental Commitments, and (ii) the Specified Incremental Commitments shall not be available for Loans or Letters of Credit.

Section 5. Amendments. Subject to the terms and conditions set forth herein, effective as of the Amendment Effective Date:

(a) Amendments to Credit Agreement.

(i) the Credit Agreement is hereby amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken-text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined) as set forth in the pages of the Amended Agreement attached as Annex II hereto.

(ii) Annex I to the Credit Agreement is amended and restated in its entirety by Annex I attached hereto.

(iii) Each Schedule to the Credit Agreement is amended and restated in its entirety by the Schedules attached hereto.

(iv) Each Exhibit to the Credit Agreement is amended and restated in its entirety by the Exhibits attached hereto.

(b) Amendments to U.S. Security Agreement.

(i) the definition of “Excluded Deposit Accounts” in Section 1.1(c) of the U.S. Security Agreement is hereby amended by (A) deleting the word “and” immediately prior to the reference to clause (iv) therein, and (B) adding the phrase “, and (v) Excluded Factoring Bank Accounts” immediately prior to the proviso at the end of such definition; and

(ii) the definition of “Excluded Property” in Section 1.1(c) of the Security Agreement is hereby amended by: (1) adding the following proviso at the end of clause (e) thereof:

“; provided, further, that, notwithstanding anything to the contrary in this clause (e)(ii) or any other provision in any Loan Document, the pledge of or grant of a security interest in any Equity Interests issued by a Specified Aleris Subsidiary shall not be subject to the limitations set forth in this clause (e)(ii) or in any comparable provision in any other Loan Document”,

(2) deleting the “and” at the end of clause (i) thereof, and (3) deleting the “;” at the end of clause (j) thereof and replacing it with “, and” and adding the following as clause (k): “(k) Excluded Property (as defined in the Credit Agreement);”.

(iii) Section 4.5(a) of the U.S. Security Agreement is hereby amended to delete the stricken text (indicated textually in the same manner as the following example: ~~stricken-text~~) and to add the double-underlined text (indicated textually in the same manner as the following example: double-underlined) as set forth in the following paragraph:

Except as expressly permitted by Section 5.13 of the Credit Agreement, it shall not move any ~~Equipment or~~ Inventory (other than Inventory in transit from a supplier or vendor to a permitted location or between permitted locations or Inventory in transit to a customer, and Inventory having Dollar Equivalent fair market value not in excess of \$~~10,000,000~~ \$15,000,000 in the aggregate for all ~~Loan Parties~~Borrowers and Borrowing Base Guarantors) to any location, other than (x) any location that is listed in Schedule 3.24 to Amendment No. 2, a Borrowing Base Certificate or the relevant Schedules to the Perfection Certificate as to which the steps required by clause (ii) below have been completed or (y) a Mortgaged Property or a leased property subject to a Landlord Access Agreement, unless (i) it shall have given the Collateral Agent not less than ~~30~~10 days' (or such shorter period as may be determined by the Collateral Agent in its sole discretion) prior written notice (in the form of an Officers' Certificate) of its intention so to do, clearly describing such new location and providing such other information in connection therewith as the Collateral Agent may request and (ii) to the extent applicable with respect to such new location, such Pledgor shall have complied with Section 3.4(g); provided that notwithstanding the foregoing, in no event shall ~~Equipment or~~ Inventory located in the continental United States be moved to any location outside of the continental United States except in connection with an Asset Sale expressly permitted by the Credit Agreement.

Section 6. Conditions Precedent to Effectiveness of this Amendment. This Amendment shall become effective as of the first date (the "**Amendment Effective Date**") on which each of the following conditions precedent shall have been satisfied, or duly waived by the Lenders:

(a) Certain Documents. The Administrative Agent shall have received each of the following, in form and substance satisfactory to the Administrative Agent and each of the Lenders:

(i) Loan Documents. Executed counterparts of each of the following, properly executed by a Responsible Officer of each applicable signing Person or by an authorized signatory appointed in an instrument signed by a governing body or Responsible Officer of such Person:

(A) this Amendment, duly executed by each of the Loan Parties, the Third Party Security Provider, the Lenders, the Issuing Banks, the Administrative Agent, the Collateral Agent, and Swingline Lenders;

(B) a Borrowing Base Certificate, dated the Amendment Effective Date and certifying the Borrowing Base as of March 31, 2019 (after giving effect to this Amendment);

(C) an Additional Secured Debt (as defined in the Intercreditor Agreement) designation certificate executed by the Designated Company in respect of the Specified Incremental Commitments, which certificate shall also be delivered to the other parties to the Intercreditor Agreement;

(D) to the extent applicable, a Note executed by each applicable Borrower in favor of each Lender that has requested a Note prior to the Amendment Effective Date;

(E) such amendments to, amendments and restatements of, confirmations or reaffirmations of, and/or supplements to, existing Security Documents and other Loan Documents, such additional Security Documents, Loan Documents and other filings, renewals of filings, searches and actions, in each case as the Administrative Agent or the Collateral Agent may require in connection with this Amendment, each in form and substance reasonably satisfactory to the Administrative Agent; provided that the foregoing shall not be required in respect of Real Property located in the United States;

(F) each Lender shall execute and deliver to the Administrative Agent (1) a Swiss Qualifying Bank representation letter and (2) a UK withholding tax representation letter, in the case of clauses (1) and (2), in form and substance reasonably satisfactory to the Administrative Agent; and

(G) that certain insurance disclosure letter, executed by the Designated Company, dated as of the Amendment Effective Date, and delivered on the Amendment Effective Date to the Agents, Issuing Banks and Lenders.

(ii) Corporate Documents.

(A) a certificate of the secretary, assistant secretary, managing director (where applicable) or other director (in the case of Holdings) of each Loan Party dated the Amendment Effective Date, certifying (1) that attached thereto is a true and complete copy of each Organizational Document (or its equivalent including the constitutional documents) of such Loan Party certified (to the extent customary in the applicable jurisdiction) as of a recent date by the Secretary of State (or equivalent Governmental Authority) of the jurisdiction of its organization, (2) that attached thereto is a true and complete copy of resolutions duly adopted by the Board of Directors (or equivalent governing body or Person) and/or shareholders, as applicable, of such Loan Party authorizing the execution, delivery and performance of, *inter alia*, this Amendment, the Amended Credit Agreement and the other Loan Documents to which such Person is a party that are required to be executed in connection herewith and, in the case of the Borrowers, the borrowings under the Amended Credit Agreement, and that such resolutions, or any other document attached thereto, have not been modified, rescinded, amended or superseded and are in full force and effect, (3) as to the incumbency and specimen signature of each officer or authorized signatory executing this Amendment and any Loan Document or any other document delivered in connection herewith on behalf of such Loan Party (together with a certificate of another officer as to the incumbency and specimen signature of the secretary, assistant secretary or managing director executing the certificate in this clause (A), and other customary evidence of incumbency) and (4) that the borrowing, guarantee, or granting of Liens with respect to the Loans or any of the other Secured Obligations would not cause any borrowing, guarantee, security or similar limit binding on any Loan Party to be exceeded;

(B) a certificate as to the good standing (where applicable, or such other customary functionally equivalent certificates or abstracts) of each Loan Party (in so-called “long-form” if available) as of a recent date prior to the Amendment Effective Date, from the Secretary of State in the state or jurisdiction of organization of such Loan Party (or other applicable Governmental Authority);

(C) if relevant, evidence that each Irish Guarantor has done all that is necessary to follow the procedures set out in section 82 of the Companies Act 2014 of Ireland in order to enable it to enter into this Amendment and the other Loan Documents to which such Person is a party that are required to be executed in connection herewith;

(D) evidence that each of the Loan Parties are members of the same group of companies consisting of a holding company and its subsidiaries for the purposes of Section 7 of the Companies Act 2014 of Ireland and Section 8 of the Companies Act 2014 of Ireland;

(E) up-to date certified copy of the constitutional documents
(e.g., for a German GmbH: *Handelsregisterauszug, Gesellschaftsvertrag, Gesellschafterliste*) for each German Loan Party;
and

(F) such other documents as the Lenders, the Issuing Banks, the Administrative Agent or the Collateral Agent may reasonably request.

(iii) Officer’s Certificate. The Administrative Agent shall have received a certificate, dated the Amendment Effective Date and signed by a Responsible Officer of the Designated Company, certifying (i) compliance with the conditions precedent set forth in this Section 6, (ii) that no Default has occurred and is continuing, and (iii) that each of the representations and warranties made by any Loan Party set forth in Section 9 below, in ARTICLE III of the Amended Credit Agreement, or in any other Loan Document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the Amendment Effective Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date.

(iv) Solvency Certificate. The Administrative Agent shall have received a solvency certificate in the form of Exhibit O to the Amended Credit Agreement (or in such other form as is satisfactory to the Administrative Agent to reflect applicable legal requirements), dated the Amendment Effective Date and signed by a senior Financial Officer of each Loan Party or the Designated Company.

(b) Opinions of Counsel. The Administrative Agent shall have received, on behalf of itself, the other Agents, the Lenders and the Issuing Banks, (i) a favorable written opinion of Torys LLP, special counsel for the Loan Parties and (ii) a favorable written opinion of certain local and

foreign counsel of the Loan Parties in jurisdictions to be specified by the Administrative Agent (or, in the case of Loan Documents governed by the laws of, or Persons organized under the laws of, the United Arab Emirates or the Dubai International Financial Centre, foreign counsel of the Agents), in each case (A) dated the Amendment Effective Date, (B) addressed to the Agents, the Issuing Banks and the Lenders and (C) covering such matters relating to the Amendment and the other Loan Documents delivered on the Amendment Effective Date as the Administrative Agent shall reasonably request, including, but not limited to, capacity of each Loan Party to execute, deliver and perform its obligations under this Amendment, the Amended Credit Agreement and each such Loan Document to which it is a party and enforceability of this Amendment, the Amended Credit Agreement and each such Loan Document, each in form and substance reasonably satisfactory to the Administrative Agent.

(c) Applicable Law. The Administrative Agent shall be satisfied that Holdings, the Borrowers and their respective Subsidiaries and the transactions contemplated by this Amendment that are consummated on the Amendment Effective Date shall be in full compliance with all material Applicable Law, including Regulations T, U and X of the Board, and shall have received satisfactory evidence of such compliance reasonably requested by them.

(d) Consents. All approvals of Governmental Authorities and third parties necessary to execute and deliver this Amendment and the other Loan Documents entered into on the Amendment Effective Date, and to perform all obligations thereunder, in each case shall have been obtained and shall be in full force and effect.

(e) Litigation. There shall be no governmental or judicial action, actual or threatened, that has or would have, singly or in the aggregate, a reasonable likelihood of restraining, preventing or imposing burdensome conditions on the transactions contemplated by this Amendment.

(f) USA Patriot Act; Beneficial Ownership.

(i) The Arrangers, the Agents, the Issuing Banks and the Lenders shall have received, at least five (5) Business Days prior to the Amendment Effective Date, and shall be satisfied with, all OFAC/PEP searches and customary individual background checks for the Borrowers and Guarantors, and all other documentation and other information that may be required by the Arrangers, the Agents, the Issuing Banks and the Lenders in order to enable compliance with applicable “know your customer” and anti-money laundering rules and regulations, including, without limitation, the Patriot Act and the information described in Section 11.13 of the Amended Credit Agreement.

(ii) At least five days prior to the Amendment Effective Date, each Loan Party that qualifies as a “legal entity customer” under the Beneficial Ownership Regulation shall have delivered to the Administrative Agent a Beneficial Ownership Certification in relation to such Loan Party. As of the Amendment Effective Date, the information included in the Beneficial Ownership Certifications delivered to the Administrative Agent and the Lenders by the Loan Parties is true and correct in all respects.

(g) Payment of Interest, Fees, Costs, and Expenses.

(i) The Arrangers and Administrative Agent shall have received all fees and

other amounts due and payable on or prior to the Amendment Effective Date, including, to the extent invoiced, reimbursement or payment of all reasonable out-of-pocket expenses (including the reasonable legal fees and expenses of Skadden, Arps, Slate, Meagher & Flom LLP, special counsel to the Agents, and the reasonable fees and expenses of any local counsel, foreign counsel, appraisers, consultants and other advisors) required to be reimbursed or paid by any Loan Party hereunder or under any other Loan Document.

(ii) Each Agent, each Lender (including each Existing Lender that is not a Lender party to this Amendment), and each Issuing Bank shall have received all accrued and unpaid interest, fees and other amounts owing to such Person as of the Amendment Effective Date.

(h) Representations and Warranties. Each of the representations and warranties made by any Loan Party set forth in Section 9, in Article III of the Amended Credit Agreement, and in each other Loan document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) on and as of the Amendment Effective Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) as of such earlier date, and the Administrative Agent shall have received a certificate of a Responsible Officer of the Designated Company, addressed to the Administrative Agent and dated as of the Amendment Effective Date, certifying the same.

(i) No Default or Event of Default. Before and after giving effect to this Amendment, no Default or Event of Default shall have occurred and be continuing and the Administrative Agent shall have received a certificate of a Responsible Officer of the Designated Company, addressed to the Administrative Agent and dated as of the Amendment Effective Date, certifying the same.

Notwithstanding the foregoing, to the extent that the execution and delivery of any document or the completion of any task or action is listed on Schedule 5.16 to this Amendment, such item shall not be a condition precedent and shall instead be subject to Section 5.16 of the Amended Credit Agreement.

Section 7. Conditions Precedent to the Aleris Acquisition Closing Date. The closing of the Aleris Acquisition and, so long as the Specified Incremental Commitments shall not have been reduced to zero or terminated by the Companies, the availability (or continued availability, if the Specified Incremental Commitment Availability Date occurs prior to such date) of the Specified Incremental Commitments for Loans and Letters of Credit on and after the Aleris Acquisition Closing Date shall be subject to the prior or concurrent satisfaction (or waiver in accordance with the terms of the Amended Credit Agreement) of each of the conditions precedent set forth in this Section 7.

(a) Amendment Effective Date. The Amendment Effective Date shall have occurred.

(b) Specified Aleris Subsidiaries. To the extent that there are any changes to the list of Specified Aleris Subsidiaries between the Amendment Effective Date and the Aleris Acquisition Closing Date, the Administrative Agent shall have received, at least two weeks prior to the Aleris

Acquisition Closing Date, a certificate signed by a Responsible Officer of the Designated Company setting forth an updated list of the Specified Aleris Subsidiaries, which list shall (i) designate entities as "Specified Aleris Subsidiaries" required to become Borrowers on the Aleris Acquisition Closing Date, and (ii) list any entities that constitute Specified Aleris Subsidiaries solely by virtue of clause (b) of the definition of Specified Aleris Subsidiary. As of the Amendment Effective Date, after giving effect to the Aleris Acquisition, the Specified Aleris Subsidiaries shall mean the following Subsidiaries of Aleris (as such list may be supplemented or otherwise modified from time to time in accordance with the immediately preceding sentence): (v) Aleris International, Inc., Aleris Rolled Products, Inc., UWA Acquisition Co., Name Acquisition Co., Aleris Ohio Management, Inc., International Acquisition Co., Aleris Rolled Products, LLC, Aleris Rolled Products Sales Corporation, IMCO Recycling of Ohio, LLC, Nichols Aluminum Alabama LLC, Nichols Aluminum LLC, Aleris Worldwide, Inc., and Aleris RM, Inc., as U.S. Borrowers, (w) Dutch Aluminum C.V. and Aleris Aluminum Netherlands B.V., as Dutch Guarantors, (x) Aleris Aluminum Duffel BVBA, as Belgian Borrower, (y) Aleris Deutschland Holding GmbH and Aleris Deutschland Vier GmbH Co KG, as German Guarantors, and Aleris Rolled Products Germany GmbH and Aleris Cast House Germany GmbH as German Borrowers, and (z) Aleris Switzerland GmbH, as a Swiss Borrower.

(c) a Note in respect of the Revolving Loans executed by each Borrower (including the Specified Aleris Subsidiaries) in favor of each Lender that has requested a Note with respect to its Revolving Loans prior to the Aleris Acquisition Closing Date; provided that only a pdf copy of such note shall be required to be delivered to satisfy this clause (c) on the Aleris Acquisition Closing Date (with originals to be delivered to such Lender promptly following the Aleris Acquisition Closing Date).

(d) Corporate Documents. The Administrative Agent shall have received:

(i) a certificate of the secretary, assistant secretary, managing director (where applicable) or other director (in the case of Holdings) of each Loan Party dated the Aleris Acquisition Closing Date, certifying (1) that attached thereto is a true and complete copy of each Organizational Document (or its equivalent including the constitutional documents) of such Loan Party certified (to the extent customary in the applicable jurisdiction) as of a recent date by the Secretary of State (or equivalent Governmental Authority) of the jurisdiction of its organization, (2) that attached thereto is a true and complete copy of resolutions duly adopted by the Board of Directors (or equivalent governing body or Person) and/or shareholders, as applicable, of such Loan Party authorizing the execution, delivery and performance of, *inter alia*, this Amendment, the Amended Credit Agreement and the other Loan Documents to which such Person is a party that are required to be executed in connection herewith, and that such resolutions, or any other document attached thereto, have not been modified, rescinded, amended or superseded and are in full force and effect, (3) as to the incumbency and specimen signature of each officer or authorized signatory executing this Amendment and any Loan Document or any other document delivered in connection herewith on behalf of such Loan Party (together with a certificate of another officer as to the incumbency and specimen signature of the secretary, assistant secretary or managing director executing the certificate in this clause (i), and other customary evidence of incumbency) and (4) that the borrowing or guarantee with respect to the Revolving Loans (including the Specified Incremental Commitments) or any of the other Obligations in connection therewith would not cause any

borrowing, guarantee, or similar limit binding on any Loan Party to be exceeded, each in form and substance reasonably satisfactory to the Administrative Agent;

(ii) a certificate as to the good standing (where applicable, or such other customary functionally equivalent certificates or abstracts) of each Loan Party (in so-called “long-form” if available) as of a recent date prior to the Aleris Acquisition Closing Date, from the Secretary of State in the state or jurisdiction of organization of such Loan Party (or other applicable Governmental Authority), each in form and substance reasonably satisfactory to the Administrative Agent;

(iii) if relevant, evidence that each Irish Guarantor has done all that is necessary to follow the procedures set out in section 82 of the Companies Act 2014 of Ireland in order to enable it to enter into this Amendment and the other Loan Documents to which such Person is a party that are required to be executed in connection herewith;

(iv) evidence that each of the Loan Parties are members of the same group of companies consisting of a holding company and its subsidiaries for the purposes of Section 7 of the Companies Act 2014 of Ireland and Section 8 of the Companies Act 2014 of Ireland;

(v) up-to date certified copy of the constitutional documents (e.g., for a German GmbH: *Handelsregisterauszug, Gesellschaftsvertrag, Gesellschafterliste*) for each German Loan Party; and

(vi) such other documents as the Lenders or the Administrative Agent may reasonably request.

(e) Officers' Certificate. The Administrative Agent shall have received a certificate, dated the Aleris Acquisition Closing Date and signed by an authorized signatory of the Designated Company, certifying (i) compliance with the conditions precedent set forth in this Section 7 and the accuracy of the representations and warranties contained in Section 9, (ii) that no Default has occurred and is continuing, (iii) that each of the representations and warranties made by any Loan Party set forth herein, in ARTICLE III of the Amended Credit Agreement, or in any other Loan Document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the Aleris Acquisition Closing Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date, and (iv) and certifying that each of the documents required to be delivered pursuant to clause (j) below have been delivered to the Administrative Agent on or prior to the Amendment Effective Date.

(f) Financial Statements. the Administrative Agent shall have received the following financial statements and forecasts:

(i) the consolidated balance sheets and related statements of income,

stockholders' equity and cash flows of the Designated Company and its Restricted Subsidiaries (x) as of and for the three most recent fiscal years ended at least 90 days prior to the Aleris Acquisition Closing Date, audited by and accompanied by the unqualified opinion of PricewaterhouseCoopers, and (y) as of and for each fiscal quarter ended after the end of the most recently ended fiscal year for which financial statements have been provided pursuant to clause (x) above and at least 45 days prior to the Aleris Acquisition Closing Date (which requirement may be satisfied by providing links to such information on the website of the U.S. Securities and Exchange Commission, so long as such information complies with the requirements of this clause (i));

(ii) the consolidated balance sheets and related statements of income, stockholders' equity and cash flows of Aleris and its subsidiaries (x) as of and for the three most recent fiscal years ended at least 90 days prior to the Aleris Acquisition Closing Date, audited by and accompanied by the unqualified opinion of an independent certified public accounting firm of nationally recognized standing, and (y) as of and for each fiscal quarter ended after the end of the most recently ended fiscal year for which financial statements have been provided pursuant to clause (x) above and at least 45 days prior to the Aleris Acquisition Closing Date (which requirement may be satisfied by providing links to such information on the website of the U.S. Securities and Exchange Commission, so long as such information complies with the requirements of this clause (ii));

(iii) the forecasts of financial performance of the Designated Company and its Restricted Subsidiaries and Aleris and its Subsidiaries covering the period commencing with the most recent fiscal quarter ended at least 45 days prior to the Aleris Acquisition Closing Date and ending on the date that is five years after such date, which forecasts shall have been prepared in good faith by the Designated Company and its Restricted Subsidiaries and based on assumptions believed by the Designated Company and its Restricted Subsidiaries to be reasonable, it being understood that any such forecasts may vary from actual results and such variations could be material; and

(iv) pro forma financial statements of the Designated Company and its Subsidiaries after giving effect to the Aleris Acquisition as of and for the most recent fiscal year of the Designated Company ended at least 90 days prior to the Aleris Acquisition Closing Date, and as of and for each fiscal quarter of the Designated Company ended after the end of such fiscal year and at least 45 days prior to the Aleris Acquisition Closing Date;

(g) Aleris Indebtedness. The Administrative Agent shall have received evidence reasonably satisfactory to it that all Indebtedness of Aleris and its Subsidiaries and other accrued and outstanding obligations in respect thereof (other than Indebtedness permitted under Section 6.01) has been repaid in full, all commitments thereunder have been terminated, and all security interests in connection therewith have been released, or, in the case of each of the foregoing, will be repaid in full, terminated and released, as applicable, substantially concurrently with the Aleris Acquisition Closing Date after giving effect to the application of proceeds thereof.

(h) Consummation of Aleris Acquisition. On the Aleris Acquisition Closing Date, the Aleris Acquisition shall be consummated in all material respects in accordance with the terms described in the Aleris Merger Agreement as in effect on July 26, 2018, without giving effect to

any amendments thereto or any consents or waivers that, in any such case, are materially adverse to the Lenders in their capacities as such, without the consent of the Required Lenders (it being understood that (i) any modification, amendment, consent or waiver to the definition of “Material Adverse Effect” in the Aleris Merger Agreement, or which has the effect of modifying, amending or waiving the representation or condition as to the absence of a Material Adverse Effect (as defined in the Aleris Merger Agreement) shall be deemed to be materially adverse to the Lenders, (ii) any decrease in the purchase price payable under the Aleris Merger Agreement shall not be deemed to be materially adverse to the Lenders, so long as such decrease does not exceed 10% of the consideration contemplated to be paid under the Aleris Merger Agreement as of July 26, 2018 and (iii) any increase in the purchase price contemplated to be paid under the Aleris Merger Agreement shall not be deemed to be materially adverse to the Lenders, so long as such increase is funded by additional common equity contributions to Holdings). For the avoidance of doubt, adjustments to working capital in accordance with the terms of the Aleris Merger Agreement shall not constitute an increase or decrease in purchase price for purposes of this clause (h).

(i) Joinder of Aleris and Certain of its Subsidiaries to Loan Documents. Immediately after giving effect to the consummation of the Aleris Acquisition, Aleris, each Specified Aleris Subsidiary and each direct or indirect Subsidiary of Aleris that provides a guarantee of the Term Loan Obligations or the Permitted Short Term Indebtedness on the Aleris Acquisition Closing Date (subject, in each case, to Section 14 below) shall have executed and delivered:

(i) Joinder Agreements, and

(ii) except as permitted by the paragraph immediately following clause (x) below, Section 5.11 of the Amended Credit Agreement or Section 14 below, shall have executed and delivered (or caused to be executed and delivered), all other Loan Documents, certificates (including perfection certificates), opinions and other closing deliverables consistent with the Loan Documents, certificates, opinions and other closing deliverables delivered by the Loan Parties (other than the Aleris and its Subsidiaries) on the Closing Date, the Aleris Acquisition Closing Date and the Amendment Effective Date, each in form and substance reasonably satisfactory to the Administrative Agent.

(j) Permitted Short Term Loan Documents; Revolving Credit Loan Documents. The Administrative Agent shall have received executed copies of:

(i) If the Permitted Short Term Indebtedness (or any replacement financing therefor to the extent permitted under the Amended Credit Agreement) is funded on the Aleris Acquisition Closing Date, all Permitted Short Term Loan Documents, certificates and other documents and agreements required to be delivered on the Aleris Acquisition Closing Date pursuant to the terms of the credit agreement in respect thereof (or in respect of any replacement financing therefor to the extent permitted under the Amended Credit Agreement), each of which shall be in full force and effect, and all conditions precedent to the funding of the Permitted Short Term Indebtedness shall have been satisfied (or will be satisfied concurrently with the Aleris Acquisition Closing Date); and

(ii) the Term Loan Documents entered into on the Aleris Acquisition Closing Date in connection with the Aleris Incremental Term Loans (as defined in the Term Loan Credit

Agreement) (together with all certificates and other documents and agreements required to be delivered on the Aleris Acquisition Closing Date pursuant to the terms thereof), the terms of which shall, among other things, permit the Aleris Acquisition, the Permitted Short Term Loan Documents, the terms of this Amendment, the Permitted Reorganization, the Permitted Reorganization Actions, and the Permitted Aleris Foreign Subsidiary Transfer (to the extent that such agreement has not been refinanced or otherwise replaced or repaid in full prior to such time), and such Term Loan Documents, shall each be in full force and effect and all conditions precedent to the effectiveness of the amendments set forth in each of the foregoing shall have been satisfied; provided that, to the extent that the Term Loan Credit Agreement has been refinanced or otherwise replaced to the extent not prohibited by the Loan Documents, such refinanced or replaced Term Loan Credit Agreement (together with all certificates and other documents and agreements required to be delivered on the Aleris Acquisition Closing Date pursuant to the terms thereof) shall be delivered to the Administrative Agent and shall be in full force and effect, and all conditions precedent to the effectiveness of the terms thereof shall have been satisfied, and such documents shall, among other things, permit the Aleris Acquisition, the Permitted Short Term Loan Documents, the terms of this Amendment, the Permitted Reorganization, the Permitted Reorganization Actions, and the Permitted Aleris Foreign Subsidiary Transfer.

(k) Indebtedness and Minority Interests. After giving effect to the Aleris Acquisition and the other transactions contemplated hereby, no Company shall have outstanding any Indebtedness or preferred stock other than Indebtedness permitted under Section 6.01.

(l) Opinions of Counsel. The Administrative Agent shall have received, on behalf of itself, the Collateral Agent and the Lenders, (i) a favorable written opinion of Torys LLP, special counsel for the Loan Parties, (ii) a favorable written opinion of each local and foreign counsel of the Loan Parties in jurisdictions to be specified by the Administrative Agent (or, in the case of Loan Documents governed by the laws of, or Persons organized under the laws of, the United Arab Emirates or the Dubai International Financial Centre, foreign counsel of the Agents), in each case (A) dated the Aleris Acquisition Closing Date, (B) addressed to the Administrative Agent, the Collateral Agent and the Lenders and (C) covering such matters relating to the Loan Documents and the transactions contemplated hereby as the Administrative Agent shall reasonably request, including, but not limited to, capacity of each Loan Party to execute, deliver and perform its obligations under each Loan Document to which it is a party and enforceability of each Loan Document, and (iii) to the extent that a Lender is not authorized to rely on one or more opinions delivered to the Agents and the Lenders in connection with the Credit Agreement prior to the Amendment Effective Date, each such Lender shall have received a reliance letter from counsel in each applicable jurisdiction, which letter shall authorize such Lender to rely on each such opinion, in the case of clauses (i), (ii) and (iii), each in form and substance reasonably satisfactory to the Administrative Agent.

(m) Solvency Certificate. The Administrative Agent shall have received a solvency certificate in the form of Exhibit Q to the Amended Credit Agreement (or in such other form as is satisfactory to the Administrative Agent to reflect applicable legal requirements), dated the Aleris Acquisition Closing Date and signed by a senior Financial Officer of each Loan Party or of the Designated Company.

(n) Representations and Warranties. Each of the representations and warranties made by any Loan Party set forth in Section 9 hereof, in ARTICLE III of the Amended Credit Agreement or in any other Loan Document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the Closing Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date.

(o) No Default or Event of Default. Before and after giving effect to the consummation of the Aleris Acquisition and the other transactions in connection therewith occurring on the Aleris Acquisition Closing Date, no Default or Event of Default shall have occurred and be continuing.

(p) Requirements of Law. The Administrative Agent shall be satisfied that Holdings, and Holdings’ Subsidiaries and the Aleris Acquisition and other transactions contemplated hereby that are consummated on the Aleris Acquisition Closing Date shall be in full compliance with all material Requirements of Law, including Regulations T, U and X of the Board, and shall have received satisfactory evidence of such compliance reasonably requested by them.

(q) Consents. All approvals of Governmental Authorities and third parties necessary to execute and deliver the Loan Documents entered into on the Aleris Acquisition Closing Date, and to perform all obligations under the Loan Documents and to consummate the Aleris Acquisition and the transactions contemplated hereby shall have been obtained and shall be in full force and effect.

(r) Litigation. There shall be no governmental or judicial action, actual or threatened, that has or would have, singly or in the aggregate, a reasonable likelihood of restraining, preventing or imposing burdensome conditions on the Aleris Acquisition or the other transactions contemplated hereby.

(s) Payment of Fees, Costs and Expenses. The Administrative Agent shall have received all fees required to be paid, and all expenses (including the reasonable fees and expenses of Skadden, Arps, Slate, Meagher & Flom LLP, special counsel to the Administrative Agent and Collateral Agent, and the reasonable fees and expenses of any local counsel, foreign counsel, appraisers, consultants and other advisors) for which invoices have been presented at least one Business Day prior to the Aleris Acquisition Closing Date, on or before the Aleris Acquisition Closing Date, in connection with the Aleris Acquisition and the transactions contemplated hereby.

(t) USA Patriot Act; Beneficial Ownership.

(i) The Arrangers, the Agents, the Issuing Banks and the Lenders shall have received, at least five (5) Business Days prior to the Aleris Acquisition Closing Date, and shall be satisfied with, all OFAC/PEP searches and customary individual background checks for the Borrowers and Guarantors (including Aleris and each Subsidiary of Aleris that is required to become a Borrower or a Guarantor under the Amended Credit Agreement), and all other documentation and other information that may be required by the Arrangers, the Agents, the Issuing Banks and the

Lenders in order to enable compliance with applicable “know your customer” and anti-money laundering rules and regulations, including, without limitation, the Patriot Act and the information described in Section 11.13 of the Amended Credit Agreement.

(ii) At least five days prior to the Aleris Acquisition Closing Date, each Loan Party (including Aleris and each Subsidiary of Aleris that is required to become a Borrower or a Guarantor under the Amended Credit Agreement) that qualifies as a “legal entity customer” under the Beneficial Ownership Regulation shall have delivered to the Administrative Agent a Beneficial Ownership Certification in relation to such Person. As of the Amendment Effective Date, the information included in the Beneficial Ownership Certifications delivered to the Administrative Agent and the Lenders by the Loan Parties is true and correct in all respects.

(u) No Legal Bar. With respect to each Lender, no order, judgment or decree of any Governmental Authority shall purport to restrain such Lender from making any Loans to be made by it. No injunction or other restraining order shall have been issued, shall be pending or noticed with respect to any action, suit or proceeding seeking to enjoin or otherwise prevent the consummation of, or to recover any damages or obtain relief as a result of, the transactions contemplated by this Agreement or the making of Loans hereunder.

(v) Process Agent. The Administrative Agent shall have received evidence of the acceptance by the Process Agent of its appointment as such by each Person acquired by a Loan Party in connection with the Aleris Acquisition and the transactions contemplated hereby, to the extent such Person becomes a Loan Party on the Aleris Acquisition Closing Date.

(w) No Material Adverse Effect. Since March 31, 2018 through the Aleris Acquisition Closing Date, there has been no event, change, circumstance or occurrence that, individually or in the aggregate, has had or could reasonably be expected to result in a Material Adverse Effect on Holdings and its Subsidiaries, after giving effect to the Aleris Acquisition.

(x) Borrowing Request. To the extent that any Loans are to be made on the Aleris Acquisition Closing Date, the Administrative Agent shall have received a Borrowing Request in accordance with Section 4.02 of the Amended Credit Agreement.

Notwithstanding anything to the contrary herein, in the Amended Credit Agreement or in any other Loan Document, if, after the Loan Parties’ use of commercially reasonable efforts to deliver the items required pursuant to Section 7(i)(ii) and Section 7(l) (in the case of opinions, to the extent such opinions solely relate to the documents that the Loan Parties are unable to deliver under Section 7(i)(ii)), one or more Loan Parties is unable to deliver any such items (such items, the “Specified Conditions Precedent”) required thereby on or prior to the Aleris Acquisition Closing Date, then:

(A) the Administrative Borrower shall deliver to the Administrative Agent a certificate signed by an authorized officer of the Administrative Borrower certifying that it has used commercially reasonable efforts to satisfy the Specified Conditions Precedent, and that it was unable to do so on or prior to the Aleris Acquisition Closing Date, which certificate shall be in form and substance satisfactory to the Administrative Agent and

shall include (i) a detailed list of all Specified Conditions Precedent that the Loan Parties were unable to satisfy, and shall certify that the Loan Parties shall satisfy such items no later than the date that is 60 days after the Aleris Acquisition Closing Date (or such later date agreed by the Administrative Agent), and (ii) a list of all Aleris Borrowers that have satisfied the Aleris Deemed Borrowing Base Collateral Conditions applicable to such Aleris Borrower on or prior to the Aleris Acquisition Closing Date, and certifying that for each listed Aleris Borrower, the Collateral Agent, on behalf of the Secured Parties, has a valid, perfected First Priority Lien on the Accounts and Inventory of such Aleris Borrower; and

(B) upon the Administrative Agent's receipt and written approval of the certificate described in clause (A) above, the items described in such certificate shall not constitute a condition precedent to the Aleris Acquisition Closing Date, but shall instead constitute postclosing obligations to be completed within the time period set forth in such certificate;

provided that (1) the perfection of a security interest in Collateral with respect to which a Lien may be perfected by the filing of financing statements under the UCC or equivalent filing system in a non-U.S. jurisdiction, shall be required to occur no later than 2 Business Days after the Aleris Acquisition Closing Date, (2) the perfection of a security interest in Collateral with respect to which a Lien may be perfected by filing short form security agreements or other filings with the applicable Intellectual Property filing office in the applicable jurisdiction, shall be required to occur no later than 5 Business Days after the Aleris Acquisition Closing Date, and (3) to the extent that new security documents are not entered into to replace existing security documents in connection with the Aleris Acquisition, on the Aleris Acquisition Closing Date, each Loan Party shall, if requested by the Administrative Agent, execute and deliver to the Administrative Agent a confirmation or reaffirmation of the Guarantees, Foreign Guarantees and Security Documents to which such Loan Party is a party immediately prior to giving effect to the Aleris Acquisition Closing Date.

Each Lender, by becoming a party to the Amended Credit Agreement on the Amendment Effective Date, or thereafter by executing an Assignment and Assumption, expressly consents to the terms of the immediately preceding sentence and directs the Administrative Agent to accept the certificate described in the immediately preceding sentence on or prior to the Aleris

Acquisition Closing Date in lieu of satisfying the Specified Conditions Precedent on the Aleris Acquisition Closing Date, but subject to (i) the sentence immediately below and to the postclosing periods set forth in such letter and (ii) such letter being in form and substance reasonably satisfactory to the Administrative Agent.

For the avoidance of doubt, notwithstanding anything herein or in any other Loan Document to the contrary, with respect to each Aleris Borrower, the Aleris Deemed Borrowing Base Collateral Conditions applicable to such Aleris Borrower shall be deemed not to be satisfied at any time that the Collateral Agent, on behalf of the Secured Parties, does not have a valid, perfected First Priority Lien on the Accounts and Inventory of such Aleris Borrower.

The delivery of a Borrowing Request (if any, in connection with the Aleris Acquisition Closing Date) shall constitute a representation and warranty by the Person delivering such Borrowing

Request and each other Loan Party that on the Aleris Acquisition Closing Date (both immediately before and after giving effect to each Credit Extension on such date) the conditions contained in this Section 7 have been (or on the Aleris Acquisition Closing Date, will be) satisfied (which representation and warranty shall be deemed limited to the knowledge of the Loan Parties in the case of the first sentence of clause (u) above.

Section 8. Availability of Specified Incremental Commitments if the Aleris Acquisition Closing Date has not Occurred. If the Aleris Acquisition Closing Date has not occurred on or prior to the date that is 6 months after the Amendment Effective Date, so long as the Specified Incremental Commitments shall not have been reduced to zero or terminated by the Companies, the availability of the Specified Incremental Commitments for Loans and Letters of Credit on and after such date shall be subject to the satisfaction (or waiver in accordance with the terms of the Amended Credit Agreement) of each of the conditions precedent set forth in this Section 8; provided that if the Specified Incremental Commitment Availability Date does not occur on or prior to the date that is 6 months after the Amendment No. 2 Effective Date, the Specified Incremental Commitments shall be deemed to be zero for all purposes under the Loan Documents.

(a) Amendment Effective Date. The Amendment Effective Date shall have occurred.

(b) Increase Joinder. Each of the conditions precedent set forth in Section 2.23(b) of the Amended Credit Agreement shall have been satisfied.

(c) Officers' Certificate. The Administrative Agent shall have received a certificate, dated the Specified Incremental Availability Date and signed by an authorized signatory of the Designated Company, certifying (i) compliance with the conditions precedent set forth in this Section 8 and the accuracy of the representations and warranties contained in Section 9, (ii) that no Default has occurred and is continuing, and (iii) that each of the representations and warranties made by any Loan Party set forth herein, in ARTICLE III of the Amended Credit Agreement, or in any other Loan Document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) on and as of the Specified Incremental Availability Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) as of such earlier date.

Section 9. Representations and Warranties. Each Loan Party represents and warrants to the Administrative Agent and each Lender as follows:

(a) After giving effect to this Amendment, each of the representations and warranties in the Credit Agreement or in any other Loan Document are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) on and as of the date hereof as though made on and as of such date, except to the extent that any such representation or warranty expressly relates to an earlier date, in which case such representations and warranties are true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, "Material Adverse Effect" or similar language, in all respects) as of such earlier date.

(b) The execution and delivery by the Canadian Borrower, each other Loan Party and the Third Party Security Provider of this Amendment, and the performance of this Amendment and the Amended Credit Agreement by the Canadian Borrower, each other Loan Party and the Third Party Security Provider, in each case have been duly authorized by all requisite organizational action on its part and will not violate any of its Organizational Documents.

(c) This Amendment has been duly executed and delivered by the Canadian Borrower, each other Loan Party and the Third Party Security Provider, and each of this Amendment and the Amended Credit Agreement constitutes the Canadian Borrower's, such Loan Party's or such Third Party Security Provider's, as applicable, legal, valid and binding obligation, enforceable against it in accordance with their terms, except as the same may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting the rights of creditors generally and by general principles of equity.

(d) Before and after giving effect to this Amendment, no Default or Event of Default has occurred and is continuing as of the date hereof.

(e) As of the Amendment Effective Date, the information included in the Beneficial Ownership Certifications delivered to the Administrative Agent and the Lenders by the Loan Parties is true and correct in all respects.

Section 10. Continuing Effect; Liens and Guarantees; No Novation; Brazilian Civil Code.

(a) Each of the Loan Parties and the Third Party Security Provider hereby consents to this Amendment. Each of the Loan Parties and the Third Party Security Provider hereby acknowledges and agrees that all of its Secured Obligations, including all Liens and (in the case of the Loan Parties) Guarantees granted to the Secured Parties under the applicable Loan Documents, are ratified and reaffirmed and that such Liens and Guarantees shall continue in full force and effect on and after Amendment Effective Date to secure and support the Secured Obligations of the Canadian Borrower and the Guarantors. Each of the Loan Parties hereby further ratifies and reaffirms the validity, enforceability and binding nature of the Secured Obligations.

(b) Holdings and each Subsidiary Guarantor hereby (i) acknowledges and agrees to the terms of this Amendment and (ii) confirms and agrees that, each of its Guarantee and any Foreign Guarantee is, and shall continue to be, in full force and effect, and shall apply to all Secured Obligations without defense, counterclaim or offset of any kind and each of its Guarantee and any such Foreign Guarantee is hereby ratified and confirmed in all respects. The Canadian Borrower hereby confirms its liability for the Secured Obligations, without defense, counterclaim or offset of any kind.

(c) Holdings, the Canadian Borrower, each other Loan Party and the Third Party Security Provider hereby ratifies and reaffirms the validity and enforceability (without defense, counterclaim or offset of any kind) of the Liens and security interests granted by it to the Collateral Agent for the benefit of the Secured Parties to secure any of the Secured Obligations by Holdings, the Canadian Borrower, any other Loan Party and the Third Party Security Provider pursuant to the Loan Documents to which any of Holdings, the Canadian Borrower, any other Loan Party or the Third Party Security Provider is a party and hereby confirms and agrees that notwithstanding the

effectiveness of this Agreement, and except as expressly amended by this Agreement, each such Loan Document is, and shall continue to be, in full force and effect and each is hereby ratified and confirmed in all respects, except that, on and after the effectiveness of this Amendment, each reference in the Loan Documents to the "Credit Agreement", "thereunder", "thereof" (and each reference in the Credit Agreement to this "Agreement", "hereunder" or "hereof") or words of like import shall mean and be a reference to the Credit Agreement as amended by this Agreement.

(d) Without limiting the generality of this Section 10 or Section 11, (i) neither this Amendment, the Amended Credit Agreement, nor any other Loan Document entered into in connection herewith or therewith, shall extinguish the "Secured Obligations" (or any term of like import) as defined or referenced in each Security Agreement, or the "Secured Obligations" under and as defined in the Existing Credit Agreement (collectively, the "**Loan Document Secured Obligations**"), or discharge or release the priority of any Loan Document, and any security interest previously granted pursuant to each Loan Document is hereby reaffirmed and each such security interest continues in effect and secures the Loan Document Secured Obligations, (ii) nothing contained herein, in the Amended Credit Agreement or any other Loan Document entered into in connection herewith or therewith shall be construed as a substitution or novation of all or any portion of the Loan Document Secured Obligations or instruments securing any of the foregoing, which shall remain in full force and effect and shall continue as obligations under the Amended Credit Agreement, and (iii) nothing implied in this Amendment, the Amended Credit Agreement or any other Loan Document entered into in connection herewith or therewith, or in any other document contemplated hereby or thereby shall be construed as a release or other discharge of any Loan Party or the Third Party Security Provider from any of its Loan Document Secured Obligations, it being understood that such obligations shall continue as obligations under the Amended Credit Agreement.

(e) **FOR PURPOSES SOLELY OF ARTICLE 9 OF BRAZILIAN DECREE LAW NO. 4,657 DATED SEPTEMBER 4, 1942, AND ARTICLE 78 OF THE BRAZILIAN CIVIL CODE, THE TRANSACTIONS CONTEMPLATED HEREBY HAVE BEEN CONSTITUTED AND PROPOSED TO THE BRAZILIAN GUARANTOR BY THE LENDERS OUTSIDE BRAZIL.**

Section 11. U.S. Reaffirmation.

(a) The Reaffirming Parties hereby confirm their respective guarantees, assignments, pledges and grants of security interests, as applicable, under the U.S. Security Agreement, and agree that such guarantees, assignments, pledges and grants of security interests shall continue to be in full force and effect and shall accrue to the benefit of the Collateral Agent for the benefit of the Secured Parties.

(b) Each Reaffirming Party hereby confirms and agrees that the "Secured Obligations" (or any term of like import) as defined or referenced in the U.S. Security Agreement will include the "Secured Obligations" as defined in the Credit Agreement.

Section 12. Grant of Security Interest. In furtherance of the reaffirmations set forth in the preceding Section 11, each Reaffirming Party hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties, a lien on and security interest in all the right, title and interest of such Reaffirming Party in, to and under all Pledged Collateral (as defined in the U.S. Security

Agreement) to secure payment and performance of the Secured Obligations. Each Reaffirming Party hereby irrevocably authorizes the Collateral Agent to file or record financing statements and, to the extent permitted or required hereunder or under the U.S. Security Agreement, other documents or instruments in order to ensure a perfected security interest in the Pledged Collateral owned by such Reaffirming Party. Any financing statement filed by the Collateral Agent may be filed in any filing office in any UCC jurisdiction and may (i) indicate the Reaffirming Party's Pledged Collateral (1) as all assets of such Reaffirming Party or words of similar effect, regardless of whether any particular asset comprised in the Pledged Collateral falls within the scope of Article 9 of the UCC of such jurisdiction, or (2) by any other description which reasonably approximates the description contained in the U.S. Security Agreement, and (ii) contain any other information required by part 5 of Article 9 of the UCC for the sufficiency or filing office acceptance of any financing statement or amendment, including (A) whether such Reaffirming Party is an organization, the type of organization and any organization identification number issued to such Reaffirming Party, and (B) in the case of a financing statement filed as a fixture filing or indicating such Reaffirming Party's Pledged Collateral as as-extracted collateral or timber to be cut, a sufficient description of real property to which the Pledged Collateral relates.

Section 13. Reference to and Effect on the Loan Documents.

(a) Except as expressly set forth in this Amendment, all of the terms and provisions of the Credit Agreement and the other Loan Documents (including all exhibits and schedules to each of the Credit Agreement and the other Loan Documents) are and shall remain in full force and effect and are hereby ratified and confirmed. The Amendment provided for herein is limited to the specific provisions of the Credit Agreement specified herein and shall not constitute an amendment of, or an indication of the Administrative Agent's or any Lender's willingness to amend or waive, any other provisions of the Credit Agreement, any other provisions of the Credit Agreement as amended hereby, or the same sections or any provision of any other Loan Document for any other date or purpose.

(b) The execution, delivery and effectiveness of this Amendment shall not, except as expressly provided herein, operate as a waiver of any right, power or remedy of the Administrative Agent or any Lender under the Credit Agreement or any Loan Document, or constitute a waiver or amendment of any other provision of the Credit Agreement or any Loan Document except as and to the extent expressly set forth herein.

(c) The execution and delivery of this Amendment by any Loan Party or Third Party Security Provider shall not constitute a joinder by, or agreement to be bound by the terms of, any Loan Document to which such Loan Party or Third Party Security Provider is not a party.

(d) This Amendment shall constitute a Loan Document.

Section 14. Post-Closing Covenants. The applicable Loan Parties shall execute and deliver the documents and complete the tasks and take the other actions set forth on Schedule 5.16 to this Amendment, in each case within the time limits specified in such Schedule or otherwise required pursuant to Section 5.16 of the Amended Credit Agreement.

Section 15. Further Assurances. The Canadian Borrower, each other Loan Party and the Third Party Security Provider hereby agrees to execute any and all further documents, agreements and instruments and take all further actions that the Administrative Agent deems reasonably necessary or advisable in connection with this Amendment, including to continue and maintain the effectiveness of the Liens and guarantees provided for under the Loan Documents, with the priority contemplated under the Loan Documents. The Administrative Agent and the Collateral Agent are hereby authorized by the Lenders to enter into all such further documents, agreements and instruments, and to file all financing statements deemed by the Administrative Agent to be reasonably necessary or advisable in connection with this Amendment.

Section 16. Counterparts. This Amendment may be executed in any number of counterparts and by different parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Receipt by the Administrative Agent of a facsimile copy or electronic image scan transmission (e.g., PDF via electronic email) of an executed signature page hereof shall constitute receipt by the Administrative Agent of an executed counterpart of this Amendment.

Section 17. **GOVERNING LAW**. **THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION. CLAUSES (B) THROUGH (E) OF SECTION 11.09 OF THE CREDIT AGREEMENT ARE HEREBY INCORPORATED BY REFERENCE INTO THIS AMENDMENT AS THOUGH FULLY SET FORTH HEREIN.**

Section 18. Headings. Section headings contained in this Amendment are included herein for convenience of reference only and shall not constitute a part of this Amendment for any other purposes.

Section 19. **WAIVER OF JURY TRIAL**. **EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE REQUIREMENTS OF LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AMENDMENT, ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY).**

Section 20. FATCA. For purposes of determining withholding Taxes imposed under FATCA, from and after the Amendment No. 2 Effective Date, the Loan Parties and the Agents shall treat (and the Lenders and Issuing Banks hereby authorize the Agents to treat) the Amended Credit Agreement as not qualifying as a “grandfathered obligation” within the meaning of Treasury Regulation Section 1.1471-2(b)(2)(i).

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Amendment to be executed by their respective officers and members thereunto duly authorized, on the date first indicated above.

NOVELIS INC., as a Canadian Borrower, Administrative Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Vice President and Treasurer

AV METALS INC., as Holdings

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Authorized Signatory

NOVELIS CORPORATION, as a U.S. Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Assistant Treasurer

NOVELIS GLOBAL EMPLOYMENT
ORGANIZATION, INC., as a U.S. Borrower and a
Guarantor

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Treasurer

NOVELIS SOUTH AMERICA HOLDINGS LLC,
as a U.S. Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Treasurer

NOVELIS ACQUISITIONS LLC, as a U.S. Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Treasurer

NOVELIS HOLDINGS INC.,
as a U.S. Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Treasurer

NOVELIS UK LTD, as a U.K. Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Attorney

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

NOVELIS EUROPE HOLDINGS LIMITED,
as a U.K. Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Attorney

NOVELIS SERVICES LIMITED,
as a U.K. Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Attorney

NOVELIS AG, as a Swiss Borrower, European
Administrative Borrower and a Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller

Title: Authorized Signatory

NOVELIS SWITZERLAND SA,
as a Swiss Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller

Title: Authorized Signatory

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

4260848 CANADA INC., as a Canadian Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Authorized
Signatory

4260856 CANADA INC., as a Canadian Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Authorized
Signatory

8018227 CANADA INC., as a Canadian Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Authorized
Signatory

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

SIGNED AND DELIVERED AS A DEED for and on behalf of NOVELIS ALUMINIUM HOLDING
UNLIMITED COMPANY
by its lawfully appointed attorney, as Irish Guarantor in the presence of:

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Attorney
witness:

By: /s/ Shannon Curran
Name: Shannon Curran
Title: Senior Legal Manager

Address: 3560 Lenox Road, Suite 2000
Atlanta, GA 30326

Occupation: Paralegal

NOVELIS DEUTSCHLAND GMBH,
as a German Borrower and a German Guarantor

By: /s/ Randal P. Miller
Name: Randal P. Miller
Title: Person Authorized

NOVELIS SHEET INGOT GMBH,
as a German Guarantor

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Person Authorized

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

NOVELIS DO BRASIL LTDA.,
as Brazilian Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller
Title: Attorney-in-Fact

witness: /s/ Michael Shelby
Name: Michael Shelby
ID: _____
witness: /s/ Shannon Curran
Name: Shannon Curran
ID: _____

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

NOVELIS PAE S.A.S., as French Guarantor

By: /s/ Randal P. Miller

Name: Randal P. Miller

Title: Attorney-in-Fact NOVELIS MEA LTD, a Company Limited by Shares under the Companies Law of the Dubai International Financial Centre, as Dubai Guarantor

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Authorized Signatory

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

NOVELIS ITALIA S.P.A., as Third Party Security Provider

By: /s/ Randal P. Miller Name: Randal P. Miller Title: Attorney
WELLS FARGO BANK, NATIONAL
ASSOCIATION, as Administrative Agent, Collateral Agent, U.S. Swingline Lender and as a
Lender

By: /s/ Daniel Denton
Name: Daniel Denton
Title: Vice President

WELLS FARGO BANK, N.A. (LONDON BRANCH), as European Swingline Lender

By: /s/ N B Hogg
Name: N B Hogg
Title: Authorized Signatory

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

ABN AMRO CAPITAL USA LLC,
as a Lender

By: /s/ Jamie Matos
Name: Jamie Matos Title: Vice President

By: /s/ Name: John Sullivan Title: Managing Director
John
Sullivan
Bank of America, N.A., as an Issuing Bank

By: /s/ John Olsen
Name: John Olsen
Title: Senior Vice President

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

Bank of America, N.A., as a Lender

By: /s/ John Olsen

Name: John Olsen

Title: Senior Vice President

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

Bank of America, N.A., as an Aleris Issuing Bank

By: /s/ John Olsen
Name: John Olsen
Title: Senior Vice President

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

Bank of Montreal, Chicago Branch as a Lender

By: /s/ Kimberly Ptak Name: Kimberly Ptak
Title: Authorized Officer

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

Bank of Montreal, London Branch as a Lender

By: /s/ Tom Woolgar

Name: Tom Woolgar Title: Authorized Officer

By: /s/ Scott Matthews

Name: Scott Matthews

ta Title: Authorized Officer

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

BARCLAYS BANK PLC,
as a Lender

By: /s/ Sean Duggan
Name: Sean Duggan
Title: Vice President

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

BNP Paribas, as a Lender

By: /s/ Guelay Mese
Name: Guelay Mese
Title: Director

By: /s/ Raymond G. Dunning
Name: Raymond G. Dunning
Title: Managing Director

CITIBANK, N.A., as a Lender

By: /s/ Brendan MacKay Name: Brendan MacKay
Title: Director & Vice President

CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH
as a Lender

By: /s/ Doreen Barr Name: Doreen Barr
Title: Authorized Signatory

By: /s/ Andrew Griffin
Name: Andrew Griffin
Title: Authorized Signatory

Deutsche Bank AG New York Branch, as a Lender and Issuing Bank

By: /s/ Michael Strobel Name: Michael Strobel Title:
Vice President

By: /s/ Marguerite Sutton Name: Marguerite Sutton
Title: Vice President

Deutsche Bank AG New York Branch, as an Aleris Issuing Bank

By: /s/ Marguerite Sutton

Name: Marguerite Sutton
Title: Vice President

By: /s/ Michael Strobel Name: Michael Strobel
Title: Vice President

HSBC Bank USA, N.A., as a Lender and Issuing Bank

By: /s/ Christopher M Samms
Name: Christopher M Samms
Title: Senior Vice President #9426

HSBC Bank USA, N.A., as an Issuing Bank

By: /s/ Christopher M Samms
Name: Christopher M Samms
Title: Senior Vice President #9426

ING CAPITAL LLC, as a Lender

By: /s/ Jean V. Grasso
Name: Jean V. Grasso
Title: Managing Director

By: /s/ Jeff Chu
Name: Jeff Chu Title: Vice President

JPMORGAN CHASE BANK, N.A.,
as a Lender

By: /s/ Tasvir Hasan Name: Tasvir Hasan
Title: Executive Director

JPMORGAN CHASE BANK, N.A.,
as an Aleris Issuing Bank

By: /s/ Tasvir Hasan Name: Tasvir Hasan Title: Executive Director

JP Morgan Europe Limited as an Aleris Issuing Bank

By: /s/ Kennedy Capin
Name: Kennedy Capin
Title: Authorized Officer

MORGAN STANLEY BANK, N.A.
as a Lender

By: /s/ Michael King Name: Michael King
Title: Authorized Signatory

PNC Bank, National Association, as a Lender

By: /s/ Christal Sturtz Name: Christal Sturtz

Title: Assistant Vice President

Regions Bank, as a Lender

By: /s/ Scott Martin

Name: Scott Martin

Title: Vice President

Standard Chartered Bank, as a Lender

By: /s/ Ambrish Mathur

Name: Ambrish Mathur

Title: Executive Director

SOCIETE GENERALE,

as a Lender

By: /s/ Michiel van der Voort

Name: Michiel van der Voort Title: Managing Director

[SIGNATURE PAGE TO AMENDMENT NO. 2 TO SECOND AMENDED AND RESTATED CREDIT AGREEMENT]

Commitments

<u>Lender</u>	<u>Revolving Commitments</u> ¹	<u>Specified Incremental Commitments</u>
Wells Fargo Bank, National Association	\$146,666,666.68	\$73,333,333.32
Bank of America, N.A.	\$93,333,333.33	\$46,666,666.67
Citibank, N.A.	\$93,333,333.33	\$46,666,666.67
Deutsche Bank AG New York Branch	\$93,333,333.33	\$46,666,666.67
JPMorgan Chase Bank, N.A.	\$93,333,333.33	\$46,666,666.67
Bank of Montreal, Chicago Branch and Bank of Montreal, London Branch	\$40,000,000.00	\$20,000,000.00
Barclays Bank Plc	\$40,000,000.00	\$20,000,000.00
BNP Paribas	\$40,000,000.00	\$20,000,000.00
HSBC Bank USA, N.A.	\$40,000,000.00	\$20,000,000.00
Societe Generale	\$40,000,000.00	\$20,000,000.00
Standard Chartered Bank	\$40,000,000.00	\$20,000,000.00
ABN AMRO Capital USA LLC	\$40,000,000.00	\$20,000,000.00
ING Capital LLC	\$40,000,000.00	\$20,000,000.00
PNC Bank, N.A.	\$40,000,000.00	\$20,000,000.00
Regions Bank	\$40,000,000.00	\$20,000,000.00
Credit Suisse AG, Cayman Islands Branch	\$40,000,000.00	\$20,000,000.00
Morgan Stanley Bank, N.A.	\$40,000,000.00	\$20,000,000.00
TOTAL	\$1,000,000,000.00	\$500,000,000.00

¹ Excluding the Specified Incremental Commitments.

Annex II

Amended Credit Agreement

~~\$1,000,000,000~~ 1,500,000,000

SECOND AMENDED AND RESTATED CREDIT AGREEMENT

dated as of October 6, 2014,

AS AMENDED BY AMENDMENT NO. 1,

dated as of September 14, 2017,

AS AMENDED BY AMENDMENT NO. 2,

dated as of April 15, 2019

among

NOVELIS INC., as ~~Parent~~ Canadian Borrower,

NOVELIS CORPORATION as a U.S. Borrower,

THE OTHER U.S. SUBSIDIARIES OF ~~PARENT-BORROWER~~ THE DESIGNATED HOLDCO
PARTY HERETO AS U.S. BORROWERS,

NOVELIS UK LTD, as a U.K. Borrower,

NOVELIS AG,

as a Swiss Borrower,

NOVELIS DEUTSCHLAND GMBH,

as a German Borrower,

THE OTHER BORROWERS FROM TIME TO TIME PARTY HERETO,

AV METALS INC.,

THE OTHER GUARANTORS PARTY HERETO,

THE LENDERS PARTY HERETO,

WELLS FARGO BANK, NATIONAL ASSOCIATION,

as Administrative Agent, Collateral Agent, and U.S. Swingline Lender,

WELLS FARGO BANK, N.A. (LONDON BRANCH), as European Swingline Lender, and

BANK OF AMERICA, N.A. AND DEUTSCHE BANK AG NEW YORK BRANCH, AND SOLELY WITH RESPECT TO EXISTING LETTERS OF CREDIT,

HSBC BANK USA, N.A., as Issuing Banks.

MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,

~~CITIGROUP GLOBAL MARKETS, INC~~ CITIBANK, N.A.,

DEUTSCHE BANK SECURITIES INC., and

JPMORGAN CHASE BANK, N.A., as Co-Syndication Agents.

WELLS FARGO BANK, NATIONAL ASSOCIATION,

MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,

~~CITIGROUP GLOBAL MARKETS, INC~~ CITIBANK, N.A.,

DEUTSCHE BANK SECURITIES INC., and

JPMORGAN CHASE BANK, N.A.,

as Joint Lead Arrangers and Joint Bookmanagers.

TABLE OF CONTENTS

Page

ARTICLE I

DEFINITIONS

SECTIONDefined Terms 1
1.01

SECTIONClassification of Loans ~~and~~, Borrowings and Commitments ~~++0~~138
1.02

SECTIONTerms Generally; Alternate Currency Transaction ~~++0~~138
1.03

SECTIONAccounting Terms; GAAP ~~++2~~139
1.04

SECTIONResolution of Drafting Ambiguities ~~++3~~141
1.05

SECTIONPro Forma Calculations ~~++3~~141
1.06

SECTIONDivisions 141
1.07

ARTICLE II

THE CREDITS

SECTIONCommitments. ~~++3~~141
2.01

SECTIONLoans. ~~++6~~145
2.02

SECTIONBorrowing Procedure. ~~++8~~146
2.03

SECTIONEvidence of Debt. ~~++0~~149
2.04

SECTIONFees. ~~++1~~151
2.05

SECTIONInterest on Loans. ~~+23~~152
2.06

SECTIONTermination and Reduction of Commitments. ~~+25~~154
2.07

SECTIONInterest Elections. ~~+26~~155
2.08

SECTION[intentionally omitted]. ~~+27~~157
2.09

SECTIONOptional and Mandatory Prepayments of Loans. ~~+27~~157
2.10

SECTIONAlternate Rate of Interest ~~+3+~~161
2.11

SECTIONYield Protection; Change in Law Generally. ~~+3~~⁺¹162
2.12

SECTIONBreakage Payments ~~+3~~⁺⁴166
2.13

SECTIONPayments Generally; Pro Rata Treatment; Sharing of Setoffs. ~~+3~~⁺⁵166
2.14

SECTIONTaxes. ~~+3~~⁺⁸169
2.15

SECTIONMitigation Obligations; Replacement of Lenders. ~~+4~~⁺⁴176
2.16

SECTIONSwingline Loans. ~~+4~~⁺⁵177
2.17

SECTIONLetters of Credit. ~~+4~~⁺⁹181
2.18

SECTIONInterest Act (Canada); Criminal Rate of Interest; Nominal Rate of Interest. ~~+5~~⁺⁶189
2.19

SECTION~~[intentionally omitted]~~. ~~+5~~⁺⁷Designation of Additional German Borrowers and U.S. Borrowers. 190
2.20

SECTIONRepresentation to Swiss ~~Borrower~~Borrowers. ~~+5~~⁺⁷192
2.21

SECTIONBlocked Loan Parties ~~+5~~⁺⁸193
2.22

SECTIONIncrease in Commitments. ~~+5~~⁺⁸193
2.23

ARTICLE III

REPRESENTATIONS AND WARRANTIES

SECTIONOrganization; Powers ~~+6~~⁺⁰196
3.01

SECTIONAuthorization; Enforceability ~~+6~~⁺¹196
3.02

SECTIONNo Conflicts ~~+6~~⁺¹196
3.03

SECTIONFinancial Statements; Projections. ~~+61~~196
3.04

SECTIONProperties. ~~+62~~197
3.05

SECTIONIntellectual Property. ~~+63~~198
3.06

SECTIONEquity Interests and Subsidiaries. ~~+64~~199
3.07

SECTIONLitigation; Compliance with Laws ~~+64~~200
3.08

SECTIONAgreements ~~+65~~200
3.09

SECTIONFederal Reserve Regulations ~~+65~~200
3.10

SECTIONInvestment Company Act ~~+65~~201
3.11

SECTIONUse of Proceeds ~~+65~~201
3.12

SECTIONTaxes ~~+65~~201
3.13

SECTIONNo Material Misstatements ~~+66~~201
3.14

SECTIONLabor Matters ~~+66~~201
3.15

SECTIONSolvency. ~~+66~~202
3.16

SECTIONEmployee Benefit Plans ~~+67~~203
3.17

SECTIONEnvironmental Matters. ~~+69~~204
3.18

SECTIONInsurance ~~+70~~205
3.19

SECTIONSecurity Documents. ~~+70~~206
3.20

SECTIONMaterial Indebtedness Documents ~~+74~~210
3.21

SECTIONSanctions. ~~+74~~210
3.22

SECTIONJoint Enterprise ~~+74~~210
3.23

SECTIONLocation of Material Inventory and Equipment ~~+75~~211
3.24

SECTIONAccuracy of Borrowing Base ~~+75~~211
3.25

SECTIONSenior Notes; Material Indebtedness ~~+75~~211
3.26

SECTIONCentre of Main Interests and Establishments ~~+75~~211
3.27

SECTIONHolding and Dormant Companies ~~+76~~212
3.28

SECTIONCertain Subsidiaries ~~+76~~212
3.29

SECTIONInventory Matters ~~+76~~212
3.30

SECTIONBeneficial Ownership Certification 212
3.31

SECTIONNo Fiscal Unity 212
3.32

SECTIONEEA Financial Institutions 212
3.33

ARTICLE IV

CONDITIONS TO CREDIT EXTENSIONS

SECTION Conditions to Amendment and Restatement ~~+76~~212
4.01

SECTION Conditions to All Credit Extensions ~~+79~~216
4.02

ARTICLE V

AFFIRMATIVE COVENANTS

SECTION Financial Statements, Reports, etc ~~+80~~217
5.01

SECTION Litigation and Other Notices ~~+84~~220
5.02

SECTION Existence; Businesses and Properties. ~~+84~~221
5.03

SECTION Insurance. ~~+85~~222
5.04

SECTION Taxes. ~~+86~~223
5.05

SECTION Employee Benefits. ~~+87~~223
5.06

SECTION Maintaining Records; Access to Properties and Inspections; Annual Meetings; Field Examinations and Appraisals. ~~+88~~225
5.07

SECTION Use of Proceeds ~~+89~~226
5.08

SECTION Compliance with Environmental Laws; Environmental Reports. ~~+89~~226
5.09

SECTION Indenture Permitted Debt ~~+90~~226
5.10

SECTION Additional Collateral; Additional Guarantors. ~~+90~~227
5.11

SECTIONSecurity Interests; Further Assurances ~~+93~~231
5.12

SECTIONInformation Regarding Collateral ~~+94~~232
5.13

SECTIONAffirmative Covenants with Respect to Leases ~~+95~~233
5.14

SECTIONTen Non-Bank Regulations and Twenty Non-Bank Regulations: ~~+95~~233
5.15

SECTIONPost-Closing Covenants ~~+95~~; Covenants in Respect of Hedging Agreements Following the Aleris Acquisition Closing
5.16 Date 234

SECTIONDesignation of Subsidiaries ~~195~~234
5.17

ARTICLE VI

NEGATIVE COVENANTS

SECTIONIndebtedness ~~196~~235
6.01

SECTIONLiens ~~202~~241
6.02

SECTIONSale and Leaseback Transactions ~~206~~246
6.03

SECTIONInvestments, Loan and Advances ~~207~~247
6.04

SECTIONMergers, Amalgamations and Consolidations ~~210~~251
6.05

SECTIONAsset Sales ~~212~~253
6.06

SECTIONCash Pooling Arrangements ~~217~~259
6.07

SECTIONDividends ~~218~~259
6.08

SECTIONTransactions with Affiliates ~~219~~261
6.09

SECTIONMinimum Consolidated Fixed Charge Coverage Ratio ~~221~~262
6.10

SECTIONPrepayments of Other Indebtedness; Modifications of Organizational Documents and Other Documents, etc. ~~221~~262
6.11

SECTIONLimitation on Certain Restrictions on Restricted Subsidiaries ~~222~~264
6.12

SECTIONIssuance of Disqualified Capital Stock ~~223~~266
6.13

SECTIONParent Borrower ~~224~~Chief Executive Offices 266
6.14

SECTIONBusiness ~~224~~266
6.15

SECTIONLimitation on Accounting Changes ~~224~~267
6.16

SECTIONFiscal Year ~~224~~267
6.17

SECTIONMargin Rules ~~225~~267
6.18

SECTIONNo Further Negative Pledge ~~225~~267
6.19

SECTIONCompliance with Anti-Money Laundering Laws and Anti-Corruption Law ~~225~~268
6.20

SECTION Compliance with Sanctions ~~226~~268
6.21

SECTION ~~Forward Share Sale Agreement and Support Agreement~~ 226 Bank Products; Bank Product Debt 268
6.22

SECTION Canadian Defined Benefit Plans ~~226~~269
6.23

ARTICLE VII

GUARANTEE

SECTION The Guarantee ~~226~~269
7.01

SECTION Obligations Unconditional ~~227~~270
7.02

SECTION Reinstatement ~~228~~271
7.03

SECTION Subrogation; Subordination ~~229~~271
7.04

SECTION Remedies ~~229~~271
7.05

SECTION Instrument for the Payment of Money ~~229~~272
7.06

SECTION Continuing Guarantee ~~229~~272
7.07

SECTION General Limitation on Guarantee Obligations ~~229~~272
7.08

SECTION Release of Guarantors ~~229~~272
7.09

SECTION Certain Tax Matters ~~230~~273
7.10

SECTION German Guarantor ~~230~~273
7.11

SECTION Swiss Guarantors ~~233~~275
7.12

SECTIONIrish Guarantor ~~234~~277
7.13

SECTIONBrazilian Guarantor ~~234~~277
7.14

SECTIONFrench Guarantor ~~234~~277
7.15

SECTIONBelgian Guarantor 278
7.16

ARTICLE VIII

EVENTS OF DEFAULT

SECTIONEvents of Default ~~235~~279
8.01

SECTIONRescission ~~239~~282
8.02

SECTIONApplication of Proceeds ~~239~~283
8.03

ARTICLE IX

COLLATERAL ACCOUNT; COLLATERAL MONITORING; APPLICATION OF COLLATERAL PROCEEDS

SECTIONAccounts; Cash Management ~~240~~284
9.01

SECTIONAdministration of Inventory and Accounts ~~244~~287
9.02

SECTIONBorrowing Base-Related Reports ~~245~~289
9.03

SECTIONRescission of Activation Notice ~~247~~291
9.04

ARTICLE X

THE ADMINISTRATIVE AGENT AND THE COLLATERAL AGENT

SECTIONAppointment, Authority and Duties of Agents ~~247~~292
10.01

SECTIONAgreements Regarding Collateral and Field Examination Reports ~~249~~293
10.02

SECTIONReliance by Agents ~~251~~295
10.03

SECTIONAction Upon Default ~~251~~296
10.04

SECTIONIndemnification of Agent Indemnitees ~~251~~296
10.05

SECTIONLimitation on Responsibilities of Agents ~~251~~296
10.06

SECTIONSuccessor Agents and Co-Agents ~~252~~297
10.07

SECTIONDue Diligence and Non-Reliance ~~253~~298
10.08

SECTIONRemittance of Payments and Collections ~~253~~298
10.09

SECTIONAgent in its Individual Capacity ~~254~~299
10.10

SECTIONAgent Titles ~~254~~299
10.11

SECTIONBank Product Providers ~~254~~299
10.12

SECTIONNo Third Party Beneficiaries ~~255~~300
10.13

SECTIONRelease ~~255~~300
10.14

SECTIONAcknowledgment of Security Trust Deed ~~255~~301
10.15

SECTIONERISA Representation 301
10.16

ARTICLE XI

MISCELLANEOUS

SECTIONNotices ~~255~~303
11.01

SECTIONWaivers; Amendment ~~260~~307
11.02

SECTIONExpenses; Indemnity; Damage Waiver ~~266~~314
11.03

SECTIONSuccessors and Assigns ~~267~~315
11.04

SECTIONSurvival of Agreement ~~271~~320
11.05

SECTIONCounterparts; Integration; Effectiveness ~~272~~320
11.06

SECTIONSeverability ~~272~~321
11.07

SECTIONRight of Setoff ~~272~~321
11.08

SECTIONGOVERNING LAW; JURISDICTION; CONSENT TO SERVICE OF
11.09

PROCESS~~273~~; BRAZILIAN CODE 321

SECTIONWAIVER OF JURY TRIAL ~~274~~323
11.10

SECTIONHeadings ~~274~~323
11.11

SECTIONTreatment of Certain Information; Confidentiality. ~~275~~323
11.12

SECTIONUSA PATRIOT Act Notice ~~275~~324
11.13

SECTIONInterest Rate Limitation ~~275~~324
11.14

SECTION[intentionally omitted] ~~276~~325
11.15

SECTIONObligations Absolute ~~276~~325
11.16

SECTIONIntercreditor Agreement ~~276~~325
11.17

SECTIONJudgment Currency. ~~276~~325
11.18

SECTIONEuro ~~277~~326
11.19

SECTIONSpecial Provisions Relating to Currencies Other Than Dollars ~~278~~326
11.20

SECTIONAbstract Acknowledgment of Indebtedness and Joint Creditorship ~~278~~327
11.21

SECTIONSpecial Appointment of Collateral Agent for German Security. ~~279~~328
11.22

SECTIONSpecial Appointment of Collateral Agent in Relation to South Korea;
11.23

Certain ~~280~~329
Lock-Up or
Listing
Agreements

SECTIONSpecial Appointment of Collateral Agent in Relation to France ~~281~~330
11.24

SECTIONSwiss Tax Ruling ~~282~~331
11.25

SECTIONDesignation of Collateral Agent under Civil Code of Quebec ~~282~~331
11.26

SECTIONMaximum Liability ~~282~~331
11.27

SECTIONNO ORAL AGREEMENT ~~283~~332
11.28

SECTIONPerformance of Borrowers' Obligations ~~283~~332
11.29

SECTIONCredit Inquiries ~~283~~332
11.30

SECTIONRelationship with Lenders ~~283~~332
11.31

SECTIONNo Advisory or Fiduciary Responsibility. ~~283~~332
11.32

SECTIONMarshaling; Payments Set Aside ~~284~~333
11.33

SECTIONOne Obligation ~~284~~333
11.34

SECTIONAcknowledgement and Consent to Bail-In of EEA Financial Institutions ~~284~~333
11.35

SECTIONLender Authorizations with respect to the NKL Share Repurchase ~~285~~334
11.36

SECTIONSpecial Appointment of Collateral Agent in Relation to Belgium 334
11.37

SECTIONBelgian Parallel Debt in Relation to the Belgian Security Agreements 334
11.38

ANNEXES

Annex I Revolving Commitments

Annex II Applicable Margin

Annex III Mandatory Cost Formula

SCHEDULES

Schedule 1.01(a) Agent's Account

Schedule 1.01(b) Subsidiary Guarantors

Schedule 1.01(c) Applicable Jurisdiction Requirements

Schedule 1.01(d) Specified Account Debtors

Schedule 1.01(e) Excluded Collateral Subsidiaries

Schedule 1.01(f) Excluded Subsidiaries

Schedule 1.01(g) Joint Venture Subsidiaries

Schedule 2.18(a) Existing Letters of Credit

Schedule 2.21 Lenders to the Swiss ~~Borrower~~ Borrowers

Schedule 3.06(c) Violations or Proceedings

Schedule 3.17 Pension Matters

~~Schedule 3.19 Insurance~~

Schedule 3.21 Material Documents

Schedule 3.24 Location of Material Inventory

Schedule 4.01(g) Local and Foreign Counsel

Schedule 5.11(b) Certain Subsidiaries

Schedule 5.16 Post-Closing Covenants

Schedule 6.01(b) Existing Indebtedness

Schedule 6.02(c) Existing Liens

Schedule 6.04(b) Existing Investments

Schedule 9.01(b) Cash Management

EXHIBITS

Exhibit A Form of Administrative Questionnaire

Exhibit B Form of Assignment and Assumption

Exhibit C Form of Borrowing Request

Exhibit D Form of Compliance Certificate

Exhibit E Form of Interest Election Request

Exhibit F Form of Joinder Agreement

Exhibit G Form of Landlord Access Agreement

Exhibit H Form of LC Request

Exhibit I Form of Borrowing Base Certificate

Exhibit J Form of Mortgage

Exhibit K-1 Form of Revolving Note

Exhibit K-2 Form of European Swingline Note

Exhibit L-1 Form of Perfection Certificate

Exhibit L-2 Form of Perfection Certificate Supplement

Exhibit M [\[Reserved\]](#)

~~Exhibit M-1 Form of U.S. Security Agreements~~

~~Exhibit M-2 Form of Canadian Security Agreements~~

~~Exhibit M-3 Form of U.K. Security Agreements~~

~~Exhibit M-4 Form of Swiss Security Agreements~~

~~Exhibit M-5 Form of German Security Agreements~~

~~Exhibit M-6 Form of Irish Security Agreements~~

~~Exhibit M-7~~ Form of Brazilian Security Agreements

~~Exhibit M-8~~ Form of Dubai Security Agreements

~~Exhibit M-9~~ Form of Madeira Security Agreements

~~Exhibit M-10~~ Form of French Security Agreements

Exhibit N ~~Form of Opinion of Company Counsel~~[\[Reserved\]](#)

Exhibit O Form of Solvency Certificate

Exhibit P Form of Intercompany Note

CREDIT AGREEMENT

This SECOND AMENDED AND RESTATED CREDIT AGREEMENT ~~(as, dated as of October 6, 2014 (as amended as of September 4, 2017, as further amended as of April 15, 2019, and as further~~ amended, restated, amended and restated, supplemented or modified, this “**Agreement**”), ~~dated as of October 6, 2014, is among~~ is among the DESIGNATED COMPANY (such term and each other capitalized term used but not defined herein having the meaning given to it in ARTICLE I), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “~~Parent~~Canadian Borrower”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the ~~Parent Borrower~~Designated Company signatory hereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (the “~~U.K. Borrower~~Novelis UK”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (the “~~German Borrower~~Novelis Deutschland”), ~~and~~ NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (the “~~Swiss Borrower~~” and, together with the ~~Parent Borrower~~, the ~~U.S. Borrowers~~, the ~~U.K. Borrower~~, and the ~~German Borrower~~, the “~~Borrowers~~”)“Novelis AG”), ~~and the other Borrowers from time to time party hereto~~, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors ~~(such term and each other capitalized term used but not defined herein having the meaning given to it in ARTICLE I)~~, the Lenders, ~~WELLS FARGO BANK, NATIONAL ASSOCIATION, as the~~ Issuing ~~Bank~~Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties and each Issuing Bank, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties and each Issuing Bank, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”).

WITNESSETH:

Borrowers have requested that Lenders enter into this Agreement in order to amend and restate the Existing Credit Agreement to finance the mutual and collective business enterprise of the Loan Parties. Upon satisfaction of the conditions set forth in this Agreement, the Existing Credit Agreement shall be, pursuant to the Amendment Agreement, amended and restated in the form of this Agreement, with the effect provided in the Amendment Agreement.

NOW, THEREFORE, for valuable consideration hereby acknowledged, the parties agree as follows:

ARTICLE I

DEFINITIONS

SECTION 1.01 Defined Terms. As used in this Agreement (including the preamble), the following terms shall have the meanings specified below:

“**Accepting Lenders**” shall have the meaning assigned to such term in Section 11.02(g).

“**Account Debtor**” shall mean, “Account Debtor,” as such term is defined in the UCC.

“**Accounts**” shall mean all “accounts,” as such term is defined in the UCC, in which such Person now or hereafter has rights.

“**Acquisition**” shall mean any transaction or series of related transactions for the direct or indirect (a) acquisition of all or substantially all of the property and assets or business of any Person, or of any business unit, line of business or division of any Person or assets constituting a business unit, line of business or division of any other Person (other than a Person that is a Restricted Subsidiary on the Closing Date), (b) acquisition of in excess of 50% of the Equity Interests of any Person or otherwise causing a person to become a Restricted Subsidiary of the acquiring Person (other than in connection with the formation or creation of a Restricted Subsidiary of the ~~Parent Borrower~~ Designated Company by any Company), or (c) merger, consolidation or amalgamation, whereby a person becomes a Restricted Subsidiary of the acquiring person, or any other consolidation with any Person, whereby a Person becomes a Restricted Subsidiary of the acquiring Person.

“**Acquisition Consideration**” shall mean the purchase consideration for any Acquisition, whether paid in cash, properties, any assumption of Indebtedness or otherwise (other than by the issuance of Qualified Capital Stock of Holdings permitted to be issued hereunder) and whether payable at or prior to the consummation of such Acquisition or deferred for payment at any future time, whether or not any such future payment is subject to the occurrence of any contingency, and includes any and all payments representing “earn-outs” and other agreements to make any payment the amount of which is, or the terms of payment of which are, in any respect subject to or contingent upon the revenues, income, cash flow or profits (or the like) of any person or business; provided that any such future payment that is subject to a contingency shall be considered Acquisition Consideration only to the extent of the reserve, if any, required under U.S. GAAP at the time of such sale to be established in respect thereof by Holdings, the ~~Parent Borrower~~ Designated Company or any of its Restricted Subsidiaries.

“**Activation Notice**” has the meaning assigned to such term in Section 9.01(c).

“**Additional German Borrowers**” shall have the meaning assigned to such term in clause (b) of the definition of German Borrowers.

“**Additional U.S. Borrowers**” shall have the meaning assigned to such term in clause (b) of the definition of U.S. Borrowers.

“**Additional Lender**” shall have the meaning assigned to such term in Section 2.23(a).

“**Additional Senior Secured Indebtedness**” shall mean any senior secured Indebtedness secured by Collateral and incurred, created, assumed or permitted to exist in reliance of Section 6.01(l) or (y); provided that no such Indebtedness shall constitute Additional Senior Secured Indebtedness unless at all times it meets the following requirements: (i) the terms of such Indebtedness do not require any amortization, mandatory prepayment or redemption or repurchase at the option of the holder thereof (other than (x) amortization not to exceed 1.0% per annum of the outstanding principal amount of such Indebtedness and (y) customary asset sale or change of control provisions, which asset sale provisions may require the application of proceeds of asset sales and casualty events co-extensive with those set forth in Section 2.10(c), as applicable, to make mandatory prepayments or prepayment offers out of such proceeds on a pari passu basis with the Secured Obligations, all Permitted First Priority Refinancing Debt and all other Additional Senior Secured Indebtedness) earlier than the earlier of the Maturity Date and the final maturity date of such Indebtedness, (ii) such Indebtedness has terms and conditions (excluding pricing and premiums) that, when taken as a whole, are not materially more restrictive or less favorable to the Companies and the Lenders than the terms of the Term Loan Documents (or, if the Term Loan Documents are no longer in effect, than the Term Loan Documents as in effect immediately prior to their termination) (except with respect to terms and conditions that are applicable only after the Maturity Date), (iii) the Liens securing such Indebtedness shall be pari passu with the Liens securing the Pari Passu Secured Obligations (other than with respect to control of remedies), such Liens shall only be on assets that constitute Collateral and, to the extent such Liens attach to Revolving Credit Priority Collateral, such Liens on Revolving Credit Priority Collateral shall be junior to the Liens securing the Secured Obligations hereunder, (iv) the security agreements relating to such Indebtedness shall be substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent), (v) such Indebtedness and the holders thereof or the Senior Representative thereunder shall be subject to the Intercreditor Agreement and the Liens securing such Indebtedness shall be subject to the Intercreditor Agreement, and (vi) after giving effect to the incurrence of such Indebtedness and to the consummation of any Permitted Acquisition or other Investment or application of funds made with the proceeds of such incurrence on a Pro Forma Basis (Leverage), the Senior Secured Net Leverage Ratio at such date shall not be greater than 3.25 to 1.0 (provided that in calculating the Senior Secured Net Leverage Ratio, the proceeds of the incurrence of such Indebtedness shall be excluded from Unrestricted Cash).

“**Additional Senior Secured Indebtedness Documents**” shall mean all documents executed and delivered with respect to the Additional Senior Secured Indebtedness or delivered in connection therewith.

“Additional Unsecured Indebtedness” shall mean any unsecured Indebtedness incurred, created, assumed or permitted to exist in reliance of Section 6.01(l); provided that (i) the terms of such Indebtedness do not require any amortization, mandatory prepayment or redemption or repurchase at the option of the holder thereof (other than customary offers to purchase upon a change of control or asset sale) earlier than earlier of the final maturity date of such Indebtedness and 180 days after the Maturity Date, (ii) such Indebtedness has terms and conditions (excluding pricing, premiums and subordination terms) that, when taken as a whole, are not materially more restrictive or less favorable to the Companies, and are not materially less favorable to the Lenders, than the terms of the Term Loan Documents (or, if the Term Loan Documents are no longer in effect, than the Term Loan Documents as in effect immediately prior to their termination) (except with respect to terms and conditions that are applicable only after the Maturity Date), and (iii) after giving effect to the incurrence of such Indebtedness and to the consummation of any Permitted Acquisition or other Investment or application of funds made with the proceeds of such incurrence on a Pro Forma Basis (Leverage), the Consolidated Interest Coverage Ratio at such date shall be greater than 2.0 to 1.0.

“Adjusted EURIBOR Rate” shall mean, with respect to any EURIBOR Borrowing for any Interest Period, an interest rate per annum (rounded upward, if necessary, to the nearest 1/100th of 1%) determined by the Administrative Agent to be equal to the sum of (a) (i) the EURIBOR Rate for such EURIBOR Borrowing in effect for such Interest Period divided by (ii) 1 minus the Statutory Reserves (if any) for such EURIBOR Borrowing for such Interest Period plus, (b) without duplication of any increase in interest rate attributable to Statutory Reserves pursuant to the foregoing clause (ii), the Mandatory Cost (if any).

“Adjusted Excess Availability” shall mean, at any time, an amount, expressed in Dollars, equal to (a) Excess Availability plus (b) Qualified Cash, in the case of this clause (b), in an aggregate amount not to exceed 5% of the lesser of (i) the Revolving Commitments of all of the Lenders and (ii) the Total Borrowing Base on the date of determination.

“Adjusted LIBOR Rate” shall mean, with respect to any Eurocurrency Borrowing for any Interest Period, an interest rate per annum (rounded upward, if necessary, to the nearest 1/100th of 1%) determined by the Administrative Agent to be equal to the sum of (a) (i) the LIBOR Rate for such Eurocurrency Borrowing in effect for such Interest Period divided by (ii) 1

minus the Statutory Reserves (if any) for such Eurocurrency Borrowing for such Interest Period plus, (b) without duplication of any increase in interest rate attributable to Statutory Reserves pursuant to the foregoing clause (ii), the Mandatory Cost (if any).

“Adjusted Total Revolving Commitment” shall mean, at any time, lesser of (i) the Total Revolving Commitment and (ii) the Term Loan Revolver Cap.

“Administrative Agent” shall have the meaning assigned to such term in the preamble hereto and includes each other person appointed as the successor pursuant to ARTICLE X.

“Administrative Borrower” shall mean ~~Novelis Inc.~~ the Designated Company, or any successor entity serving in that role pursuant to Section 2.03(b).

“Administrative Questionnaire” shall mean an Administrative Questionnaire in substantially the form of Exhibit A.

“Affiliate” shall mean, when used with respect to a specified person, another person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the person specified; provided, however, that, for purposes of Section 6.09, the term “Affiliate” shall also include (i) any person that directly or indirectly owns more than 10% of the voting power of the total outstanding Voting Stock of the person specified or (ii) any person that is an executive officer or director of the person specified.

“Agent Indemnitees” shall mean the Agents (and any sub-agent thereof) and their officers, directors, employees, Affiliates, agents and attorneys.

“Agent Professionals” shall mean attorneys, accountants, appraisers, auditors, business valuation experts, environmental engineers or consultants, turnaround consultants, and other professionals and experts retained by any Agent.

“Agents” shall mean the Administrative Agent and the Collateral Agent; and “Agent” shall mean either of them.

“Agent’s Account” shall have the meaning assigned to such term in Schedule 1.01(a) to Amendment No. 2.

“Aggregate Belgian Revolving Exposure” shall mean at any time, the sum of the Belgian Revolving Exposure of each of the Lenders at such time.

“Aggregate Individual German Revolving Exposure” shall mean at any time, the sum of the German Revolving Exposure (Individual) of each of the Lenders at such time.

“Aggregate Individual Swiss Revolving Exposure” shall mean at any time, the sum of the Swiss Revolving Exposure (Individual) of each of the Lenders at such time.

“Aggregate Total German Revolving Exposure” shall mean at any time, the sum of the German Revolving Exposure (Total) of each of the Lenders at such time.

“Aggregate Total Swiss Revolving Exposure” shall mean at any time, the sum of the Swiss Revolving Exposure (Total) of each of the Lenders at such time.

“Agreed Guarantee and Security Principles” shall mean the following principles that embody a recognition by all parties to this Agreement that there may be certain legal and practical limitations on the scope and enforceability of guarantees and security from the Guarantors in certain jurisdictions outside of the United States and Canada that become parties to this agreement after the Amendment No. 2 Effective Date. In particular:

(a) general statutory limitations, capital maintenance, financial assistance, corporate benefit, fraudulent preference, “thin capitalization” rules, regulatory restrictions and similar principles may require that the guarantee and/or security be limited by an amount or otherwise. If any such limit applies, the guarantees and security provided may be limited to the maximum amount which the relevant Guarantor may provide having regard to applicable law under the jurisdiction of organization of such Guarantor; and

(b) to the extent required to comply with applicable law, guarantees and security may be limited to mitigate a risk to the directors or officers of the relevant grantor of such guarantee and security of contravention of any statutory duty in such capacity or their fiduciary duties and/or which could reasonably be expected to result in personal, civil or criminal liability on the part of any such director or officer.

“Agreement” shall have the meaning assigned to such term in the preamble hereto.

“Aleris” shall mean Aleris Corporation, a Delaware corporation.

“Aleris Acquisition” shall mean the acquisition by Novelis Acquisitions of Aleris pursuant to the terms of the Aleris Merger Agreement on the Aleris Acquisition Closing Date, the repayment of certain Indebtedness of Aleris and its subsidiaries in connection with the Aleris Acquisition, and the payment of all fees, costs and expenses in connection with the foregoing.

“Aleris Acquisition Closing Date” shall mean the date that the Aleris Acquisition is consummated in accordance with the terms of the Aleris Merger Agreement and the conditions precedent in Section 7 of Amendment No. 2 are satisfied (or waived in accordance with the terms hereof).

“Aleris Borrowers” shall mean Aleris, the Belgian Borrower, Aleris Switzerland, the Additional German Borrowers and the Additional U.S. Borrowers.

“Aleris Casthouse” shall mean Aleris Casthouse Germany GmbH, a company with limited liability organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Koblenz with registration number HRB 1064.

“Aleris Deemed Borrowing Base Collateral Conditions” shall mean, with respect to each Aleris Borrower, that such Aleris Borrower has satisfied the conditions precedent applicable to such Aleris Borrower in Section 7 or Section 8 of Amendment No. 2 and has otherwise joined this Agreement as a Borrower and as a Guarantor, and has granted Liens on its assets to secure the Secured Obligations on terms consistent with the terms of the Loan Documents, and in accordance with the terms of Amendment No. 2, this Agreement and the other Loan Documents; provided that, with respect to each Aleris Borrower, the Aleris Deemed Borrowing Base Collateral Conditions applicable to such Aleris Borrower shall be deemed not to be satisfied at any time that the Collateral Agent, on behalf of the Secured Parties, does not have a valid, perfected First Priority Lien on the Accounts and Inventory of such Aleris Borrower.

“Aleris Hedging Collateral Requirements” shall have the meaning assigned to such term in Section 5.16(e).

“Aleris Issuing Bank” shall have the meaning assigned to such term in Amendment No. 2.

“Aleris Merger Agreement” means that certain Agreement and Plan of Merger, dated as of July 26, 2018, among the Canadian Borrower, Novelis Acquisitions, Aleris, and OCM Opportunities ALS Holdings, L.P., a Delaware limited partnership, as amended, modified or supplemented, together with any consent or waiver with respect thereto, but only to the extent that such amendment, modification, restatement, consent or waiver is not materially adverse to the Lenders or the Agents in their capacities as such, it being understood that (i) any modification, amendment, consent or waiver to the definition of “Material Adverse Effect” in the Aleris Merger Agreement, or which has the effect of modifying, amending or waiving the representation or condition as to the absence of a Material Adverse Effect (as defined in the Aleris Merger Agreement as of the Amendment No. 2 Effective Date) shall be deemed to be materially adverse to the Lenders and the Agents, (ii) any decrease in the purchase price payable under the Aleris Merger Agreement shall not be deemed to be materially adverse to the Lenders or the Agents, so long as such decrease does not exceed 10% of the consideration contemplated to be paid under the Aleris Merger Agreement as of July 26, 2018, and (iii) any increase in the purchase price contemplated to be paid under the Aleris Merger Agreement shall not be deemed to be materially adverse to the Lenders or the Agents, so long as such increase is funded by additional common equity contributions to Specified Holders that directly or indirectly own Equity Interests in the Designated Company and its Restricted Subsidiaries immediately prior to such contribution or by cash on hand or borrowings under this Agreement (so long as, in the case of a funding of borrowings under this Agreement, the Availability Conditions are satisfied at the time the Aleris Acquisition is consummated); provided, that adjustments to working capital and earn-out payments in accordance with the terms of the Aleris Merger Agreement shall not constitute an increase or decrease in purchase price for purposes of this definition.

“Aleris Rolled Products” shall mean Aleris Rolled Products Germany GmbH, a company with limited liability organized under the laws of Germany, registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Koblenz with registration number HRB 4239.

“Aleris Switzerland” shall mean Aleris Switzerland GmbH, a company organized under the laws of Switzerland.

“Alternate Currency” shall mean each of euros and GBP and, with regard only to European Swingline Loans or European Letters of Credit, Swiss francs.

“Alternate Currency Equivalent” shall mean, as to any amount denominated in Dollars as of any date of determination, the amount of the applicable Alternate Currency that could be purchased with such amount of Dollars based upon the Spot Selling Rate.

“Alternate Currency Letter of Credit” shall mean any Letter of Credit to the extent denominated in an Alternate Currency.

“Alternate Currency Revolving Loan” shall mean each Revolving Loan denominated in an Alternate Currency.

“Amendment Agreement” shall mean that certain Amendment and Restatement Agreement, dated as of the Closing Date, among the Loan Parties party thereto, the Lenders party thereto, the Administrative Agent, the Collateral Agent, the Issuing Banks, ~~party thereto~~, the U.S. Swingline Lender, the European Swingline Lender, and the other parties thereto, which effects the second amendment and restatement of this Agreement.

“Amendment No. 1” means that certain Amendment No. 1 to Second Amended and Restated Credit Agreement, dated as of September 14, 2017, among Holdings, the Borrowers, ~~party thereto~~, the other Loan Parties party thereto, Novelis Italia, S.p.A., as third party security provider, the Administrative Agent, the Collateral Agent, the European Swingline Lender, ~~and~~ each Issuing Bank party thereto and each Lender party thereto.

“Amendment No. 1 Effective Date” means the “Amendment Effective Date” as defined in Amendment No. 1.

“Amendment No. 2” means that certain Amendment No. 2 to Second Amended and Restated Credit Agreement, dated as of April 15, 2019, among Holdings, the Borrowers party thereto, the other Loan Parties party thereto, Novelis Italia, S.p.A., as third party security provider, the Administrative Agent, the Collateral Agent, the European Swingline Lender, each Issuing Bank party thereto and each Lender party thereto.

“Amendment No. 2 Effective Date” means the “Amendment Effective Date” as defined in Amendment No. 2.

“Amendment No. 2 Insurance Disclosure Letter” means that certain letter of the Designated Company, dated as of the Amendment No. 2 Effective Date and delivered on the Amendment No. 2 Effective Date to the Agents, Issuing Banks and Lenders.

“Anti-Corruption Laws” shall mean (a) the U.S. Foreign Corrupt Practices Act of 1977, as amended; (b) the U.K. Bribery Act 2010, as amended; and (c) any other anti-bribery or anticorruption laws, regulations or ordinances in any jurisdiction in which any Credit Party or any of its Subsidiaries or their respective Related Parties is located or doing business.

“Anti-Money Laundering Laws” shall mean applicable laws or regulations in any jurisdiction in which any Credit Party or any of its Subsidiaries or their respective Related Parties are located or doing business that relates to money laundering or terrorism financing, any predicate crime to money laundering, or any financial record keeping and reporting requirements related thereto.

“Applicable Administrative Borrower” shall mean the Administrative Borrower and/or the European Administrative Borrower, as the context may require.

“Applicable Eligible Jurisdiction” shall mean:

- (i) in the case of Eligible Accounts of the U.S. Borrowers, the United States, Canada, Mexico and Puerto Rico;
- (ii) in the case of Eligible Accounts of the Canadian Loan Parties, Canada and the United States;
- (iii) in the case of Eligible Accounts of ~~each U.K. Borrower and each other Borrowing Base Guarantor incorporated in England and Wales, an Applicable European Jurisdiction, the United States and Canada;~~
- (iv) ~~in the case of Eligible European Loan Party (other than Swiss Borrower), an Applicable European Jurisdiction~~ Accounts of each Swiss Borrower that is not a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, Switzerland, Germany, Poland, the United States and, Canada, or such other Applicable European Jurisdiction as the Administrative Agent may approve in its Permitted Discretion;
- (v) in the case of Eligible Accounts of each German Borrower that is not a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, Germany, Poland, the

United States, Canada or such other Applicable European Jurisdiction as the Administrative

Agent may approve in its Permitted Discretion;

(~~v~~vi) in the case of Eligible Accounts of the ~~Swiss~~Belgian Borrower, Belgium, Germany, Poland, the United States, Canada or such other Applicable European Jurisdiction as the Administrative Agent may approve in its Permitted Discretion; and

(vii) in the case of Eligible Accounts of the U.S. Borrowers or of the Canadian Loan Parties with respect to which either (x) the Account Debtor's senior unsecured debt rating is at least BBB- by S&P and Baa3 by Moody's or (y) the Account Debtor's credit quality is acceptable to the Administrative Agent, such Applicable European Jurisdictions, as may be approved by the Administrative Agent.

"Applicable European Jurisdiction" shall mean Germany, United Kingdom, France, Netherlands, Italy, Ireland, Belgium, Spain, Sweden, Finland, Austria, Denmark, Greece, Portugal, Luxembourg, and Switzerland or any other country that from time to time is a Participating Member State that is approved by the Administrative Agent in its Permitted Discretion as an "Applicable European Jurisdiction".

"Applicable Fee" shall mean, as of any date of determination, a rate per annum equal to the applicable percentage set forth below based upon average daily Total Revolving Exposure as a percentage of Total Revolving Commitment for the three-fiscal month period immediately preceding such date:

Total Revolving Exposure as a percentage of Total Revolving Commitment Applicable Fee	
Greater than 50%	0.25%
Less than or equal to 50%	0.35%

For purposes of computing the Applicable Fee with respect to Revolving Commitments, a Revolving Commitment of a Lender shall be deemed to be used to the extent of the outstanding Revolving Loans, Swingline Exposure and LC Exposure of such Lender. The Applicable Fee shall be calculated by the Administrative Agent and such calculations shall be presumed to be correct, absent manifest error.

"Applicable Law" shall mean all laws, rules, regulations and legally binding governmental guidelines applicable to the Person, conduct, transaction, agreement or matter in question, including all applicable statutory law, common law and equitable principles, and all provisions of constitutions, treaties, statutes, rules, regulations, orders and decrees of Governmental Authorities.

"Applicable LC Applicant" shall mean the Administrative Borrower, ~~Parent~~the Canadian Borrower, and/or the European Administrative Borrower, as the context may require.

"Applicable Margin" shall mean, for any day, with respect to any Revolving Loan or Swingline Loan, as the case may be, the applicable percentage set forth in Annex II under the appropriate caption.

"Approved Currency" shall mean each of Dollars and each Alternate Currency.

"Approved Fund" shall mean any Fund that is administered or managed by (a) a Lender, (b) an Affiliate of a Lender or (c) an entity or an Affiliate of an entity that administers or manages a Lender.

"Approved Member State" shall mean Belgium, France, Germany, Ireland, Italy, Luxembourg, The Netherlands, Spain, Sweden and the United Kingdom.

"Arranger" shall mean Wells Fargo Bank, National Association, Merrill Lynch, Pierce, Fenner & Smith Incorporated, ~~Citigroup Global Markets, Inc.~~Citibank, N.A., Deutsche Bank Securities Inc., and JPMorgan Chase Bank, N.A., as joint lead arrangers.

"Asset Sale" shall mean (a) any conveyance, sale, lease, sublease, assignment, transfer or other disposition (including by way of merger or consolidation and including any Sale and Leaseback Transaction) of any property, excluding sales of Inventory, dispositions of cash and Cash Equivalents and settlements under Hedging Agreements, in each such excluded case, which are in the ordinary course of business, by Holdings; ~~the Parent Borrower~~ or any of its Restricted Subsidiaries, or (b) any issuance of any Equity Interests of any Restricted Subsidiary of ~~the Parent Borrower~~Holdings.

"Asset Swap" shall mean the substantially concurrent purchase and sale or exchange of Related Business Assets or a combination of Related Business Assets and cash or Cash Equivalents between any Company and another person; provided that any cash or Cash Equivalents received must be applied in accordance with Section 2.10(c).

"Assignment and Assumption" shall mean an assignment and assumption entered into by a Lender and an Eligible Assignee (with the consent of any party whose consent is required by Section 11.04(c)), and accepted by the Administrative Agent, in substantially the form of

Exhibit B (including electronic documentation generated by use of an electronic platform containing substantially the same information as set forth in Exhibit B), or any other form approved by the Administrative Agent.

“**Attributable Indebtedness**” shall mean, when used with respect to any Sale and Leaseback Transaction, as at the time of determination, the present value (discounted at the rate implicit in the lease) of the total obligations of the lessee for rental payments during the remaining term of the lease included in any such Sale and Leaseback Transaction.

“**Auditor’s Determination**” shall have the meaning assigned to such term in Section 7.11(b).

“**Auto-Extension Letter of Credit**” shall have the meaning assigned to such term in Section 2.18(a)(v).

“**AV Metals**” shall mean AV Metals Inc., a corporation formed under the Canada Business Corporations Act.

“AV Minerals” shall mean AV Minerals (Netherlands) N.V., a company organized under the laws of the Netherlands.

“**Availability Conditions**” shall mean that, with respect to any Proposed Transaction, each of the following conditions are satisfied, as applicable:

(a) both immediately prior to and after giving effect to such Proposed Transaction, no Default shall have occurred and be continuing; and

(b) when used with regard to Section 6.08 (Dividends), immediately after giving effect to such Proposed Transaction, (i)(A) Adjusted Excess Availability on the date such Proposed Transaction is consummated and (B) average daily Adjusted Excess Availability for the 30 day period immediately preceding such Proposed Transaction (assuming such Proposed Transaction occurred on the first day of such 30 day period), in each case is greater than or equal to 20% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base or (ii)(A)(1) Adjusted Excess Availability on the date such Proposed Transaction is consummated and (2) average daily Adjusted Excess Availability for the 30 day period immediately preceding such Proposed Transaction (assuming such Proposed Transaction occurred on the first day of such 30 day period), in each case is greater than or equal to 15% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base and (B) the Consolidated Fixed Charge Coverage Ratio as of the end of the most recent fiscal quarter (on a trailing four quarter basis, on a Pro Forma Basis after giving effect to each such Proposed Transaction as if such Proposed Transaction occurred on the first day of the most recently ended fiscal quarter for which financial statements have been delivered pursuant to Section 5.01(a) and (b)) shall not be less than 1.25 to 1.0; or

(c) when used with regard to Sections 6.06 (Asset Sales) and 6.11 (Prepayments of other Indebtedness, etc.), immediately after giving effect to such Proposed Transaction, (i) Adjusted Excess Availability (or, in the case of a transaction under Section 6.06 (Asset Sales) other than a Specified Asset Sale, Excess Availability) on the date such Proposed Transaction is consummated is greater than or equal to 20% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base or (ii)(A) Adjusted Excess Availability (or, in the case of a transaction under Section 6.06 (Asset Sales) involving any Revolving Priority Collateral, Excess Availability) on the date such Proposed Transaction is consummated is greater than or equal to 15% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base and (B) the Consolidated Fixed Charge Coverage Ratio as of the end of the most recent fiscal quarter (on a trailing four quarter basis, on a Pro Forma Basis after giving effect to each such Proposed Transaction as if such Proposed Transaction occurred on the first day of the most recently ended fiscal quarter for which financial statements have been delivered pursuant to Section 5.01(a) and (b)) shall not be less than 1.25 to 1.0; or

(d) when used with regard to Section 6.04 (Investments, Loans and Advances) (including with respect to Permitted Acquisitions), and for all other Proposed Transactions not referred to in clauses (b) or (c) above, immediately after giving effect to such Proposed Transaction, (i) Adjusted Excess Availability on the date such Proposed Transaction is consummated is greater than or equal 20% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base or (ii)(A) Adjusted Excess Availability on the date such Proposed Transaction is consummated is greater than or equal to 15% of the lesser of (y) the Total Revolving Commitment and (z) the Total Borrowing Base and (B) the Consolidated Fixed Charge Coverage Ratio as of the end of the most recent fiscal quarter (on a trailing four quarter basis, on a Pro Forma Basis after giving effect to each such Proposed Transaction as if such Proposed Transaction occurred on the first day of the most recently ended fiscal quarter for which financial statements have been delivered pursuant to Section 5.01(a) and (b)) shall not be less than 1.25 to 1.0; and

(e) in each case, prior to undertaking any Proposed Transaction involving (i) payment of a Dividend of ~~\$25,000,000~~ 37,500,000 or more ~~or~~, (ii) any payment (or transfer of property having a fair market value) of ~~\$100,000,000 or more~~ 150,000,000 or more, or (iii) any calculation based on Adjusted Excess Availability, the Loan Parties shall deliver to the Administrative Agent an Officer’s Certificate demonstrating in reasonable details the satisfaction of the conditions contained in clause (b), (c) or (d) above, as applicable, which shall specify whether Qualified Cash was included in such calculation, and if so, shall include a reporting of the cash balances in the applicable deposit accounts in which Qualified Cash is deposited (attaching bank statements or other statements or supporting information satisfactory to the Administrative Agent) for the periods described in such clause (b), in form satisfactory to the Administrative Agent.

“**Availability Reserve**” shall mean reserves established from time to time by the Administrative Agent pursuant to Section 2.01(d) or otherwise in accordance with this Agreement, with respect to potential cash liabilities of the Borrowers and Borrowing Base Guarantors, costs, expenses or other amounts that may be charged against the Revolving Credit Priority Collateral prior to payment of the Obligations, and including reserves of the type described in clauses (i), (ii), (iii), (v) and (vi) of Section 2.01(d).

“**Available Amount**” shall have the meaning assigned to such term in Section 7.12(a).

“**Average Quarterly Excess Availability**” shall mean, as of any date of determination, the average daily Excess Availability for the three-fiscal month period immediately preceding such date (with the Borrowing Base for any day during such period calculated by reference to the most recent Borrowing Base Certificate delivered to the Administrative Agent on or prior to such day); provided that, for purposes of calculation of Average Quarterly Excess Availability, the percentage of such Excess Availability based on German Excess Availability shall not be limited as otherwise provided in the definition of Excess Availability. Average Quarterly Excess Availability shall be calculated by the Administrative Agent and such calculations shall be presumed to be correct, absent manifest error.

“**Bailee Letter**” shall mean an agreement in form substantially similar to Exhibit 7 to the U.S. Security Agreement or otherwise in form and substance reasonably satisfactory to the Collateral Agent.

“**Bail-In Action**” ~~means~~shall mean the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

“**Bail-In Legislation**” ~~means~~shall mean, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time which is described in the EU Bail-In Legislation Schedule.

“**Bank of America**” shall mean Bank of America, N.A., a national banking association, and its successors.

“**Bank Product**” shall mean any of the following products, services or facilities extended to any Company by a Lender or any of its Affiliates: (a) Cash Management Services; (b) commercial credit card and merchant card services (including so-called “purchase cards”, “procurement cards” or “p-cards”), payment card processing services, debit cards, and stored value cards; and (c) other banking products or services as may be requested by any Company, ~~other than; provided that, anything to the contrary contained in the foregoing notwithstanding,~~ Bank Products shall exclude Letters of Credit ~~and~~, Hedging Agreements, and any Excluded Swap Obligations.

“**Bank Product Agreement**” shall mean any agreement related to Bank Products or Secured Bank Product Obligations.

“**Bank Product Debt**” shall mean (a) all Indebtedness and other obligations ~~of an Loan Party relating to Bank Products, liabilities, reimbursement obligations, fees, or expenses owing by each Loan Party and its Subsidiaries to any Secured Bank Product Provider pursuant to or evidenced by a Bank Product Agreement and irrespective of whether for the payment of money, whether direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising, and (b) all amounts that any Agent, any Lender or any Issuing Bank is obligated to pay to a Secured Bank Product Provider as a result of such Agent, such Lender or such Issuing Bank purchasing participations from, or executing guarantees or indemnities or reimbursement obligations to, a Secured Bank Product Provider with respect to the Bank Products provided by such Secured Bank Product Provider to a Loan Party or its Subsidiaries.~~

“**Bank Product Reserve**” shall mean the aggregate amount of reserves established by Administrative Agent from time to time in respect of Secured Bank Product Obligations.

“**Bankruptcy Code**” shall mean Title 11 of the United States Code.

“**Base Rate**” shall mean, ~~for any day, a per annum rate equal to~~ the greatest of (a) the ~~Prime Rate for such day; (b) the~~ Federal Funds Rate ~~for such day, plus 0.50½%; or, (eb) the Adjusted LIBOR Rate for a 30 day interest period as determined on such day, plus 1.0%.~~ (which rate shall be calculated based upon an Interest Period of one month and shall be determined on a daily basis), plus one percentage point, and (c) the rate of interest announced, from time to time, within Wells Fargo at its principal office in San Francisco as its “prime rate”, with the understanding that the “prime rate” is one of Wells Fargo’s base rates (not necessarily the lowest of such rates) and serves as the basis upon which effective rates of interest are calculated for those loans making reference thereto and is evidenced by the recording thereof after its announcement in such internal publications as Wells Fargo may designate (and, if any such announced rate is below zero, then the rate determined pursuant to this clause (c) shall be deemed to be zero).

“**Base Rate Borrowing**” shall mean a Borrowing comprised of Base Rate Loans.

“**Base Rate Loan**” shall mean any Base Rate Revolving Loan, European Swingline Loan denominated in Dollars, or U.S. Swingline Loan.

“**Base Rate Revolving Loan**” shall mean any U.S. Revolving Loan bearing interest at a rate determined by reference to the Base Rate.

“**Belgian Borrower**” shall mean, on and after the Aleris Acquisition Closing Date following the consummation of the Aleris Acquisition, Aleris Aluminum Duffel BVBA, a private limited liability company organized under the laws of Belgium, with registered office at 2570 Duffel (Belgium), Adolf Stocletlaan 87 and with company number 0403.045.292 (RLE Antwerp, division Mechelen).

“**Belgian Borrowing Base**” shall mean at any time on or after the Aleris Acquisition Closing Date, an amount equal to the sum of the Dollar Equivalent of, without duplication:

(i) the book value of Eligible Belgian Accounts multiplied by the advance rate of 85%, plus

(ii) the lesser of (x) the advance rate of 75% of the Cost of Eligible Belgian Inventory, or (y) the advance rate of 80% of the Net Recovery Cost Percentage multiplied by the Cost of Eligible Belgian Inventory, minus

(iii) any Reserves established from time to time by the Administrative Agent with respect to the Belgian Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, that during the Aleris Deemed Borrowing Base Period, solely to the extent that the Belgian Borrower has satisfied the Aleris Deemed Borrowing Base Collateral Conditions, the Belgian Borrowing Base shall be equal to the lesser of:

(a) the Belgian Borrower's Deemed Borrowing Base Allocation in effect at such time; and

(b) the sum of the Dollar Equivalent of, without duplication:

(i) the sum of (x) 50% of the aggregate gross Accounts of the Belgian Borrower, and (y) 25% of the net book value of all Eligible Belgian Inventory; minus

(ii) any Reserves established from time to time by the Administrative Agent with respect to the Belgian Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, further, that if the Administrative Agent has not received Acceptable Collateral Diligence in respect of the Belgian Borrower on or prior to the date that is 90 days after the Aleris Acquisition Closing Date, then following such date until the date that the Administrative Agent receives Acceptable Collateral Diligence in respect of the Belgian Borrower, the Belgian Borrowing Base shall be deemed to be zero.

The Belgian Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the Belgian Borrowing Base is calculated in accordance with the terms of this Agreement. The Belgian Borrower's Deemed Borrowing Base Allocation at any time shall be determined by reference to the most recent Borrowing Base Certificate or other certificate theretofore delivered to the Administrative Agent, or in any certificate delivered to the Administrative Agent pursuant to the last paragraph of Section 9.03, with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the Belgian Borrowing Base is calculated in accordance with the terms of this Agreement.

"Belgian Guarantor" shall mean the Belgian Borrower and each Restricted Subsidiary of the Designated Company organized under the laws of Belgium that becomes a Guarantor pursuant to the terms hereof.

"Belgian Revolving Exposure" shall mean, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding Belgian Revolving Loans of such Lender, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European LC Exposure applicable to European Letters of Credit issued for the account of the Belgian Borrower.

"Belgian Revolving Loan" shall have the meaning assigned to such term in Section 2.01(a).

"Belgian Security Agreements" shall mean, collectively (i) any Security Agreements, including all subparts thereto, among any Belgian Guarantors (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Belgian Guarantor or any Person who is the holder of Equity Interests in any Belgian Guarantor in favor of the Collateral Agent and/or the Term Loan Collateral Agent in its capacity as agent for

the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Belgium, securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“Beneficially Own,” “Beneficial Owner” and “Beneficial Ownership” shall each have the meaning assigned to such term in Rules 13d-3 and 13d-5 under the Exchange Act.

“Beneficial Ownership Certification” means a certification regarding beneficial ownership as required by the Beneficial Ownership Regulation.

“Beneficial Ownership Regulation” means 31 C.F.R. § 1010.230.

“Benefit Plan” shall mean any of (a) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (b) a “plan” as defined in Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“Blocked Account” shall have the meaning assigned to such term in Section 9.01.

“Blocked Loan Party” shall have the meaning assigned to such term in Section 2.22.

“Board” shall mean the Board of Governors of the Federal Reserve System of the United States.

“Board of Directors” shall mean, with respect to any person, (i) in the case of any corporation, the board of directors of such person, (ii) in the case of any limited liability company, the board of managers (or the functional equivalent) of such person, (iii) in the case of any limited partnership, the Board of Directors of the general partner of such person and (iv) in any other case, the functional equivalent of the foregoing.

“Borrowers” shall ~~have the meaning assigned to such term in the preamble hereto~~ mean the U.S. Borrowers, the Belgian Borrower, the Canadian Borrower, the U.K. Borrowers, the German Borrowers, and the Swiss Borrowers. Unless the context otherwise requires, each reference in this Agreement to “each Borrower” or “the applicable Borrower” shall be deemed to be a reference to (vi) each U.S. Borrower on a joint and several basis, (wii) the ~~Parent~~Belgian Borrower, (xiii) the Canadian Borrower, (iv) each U.K. Borrower on a several and not joint basis, (yv) ~~the each~~ German Borrower on a several and not joint basis, and/or (zvi) ~~the each~~ Swiss Borrower on a several and not joint basis, as the case may be.

“Borrowing” shall mean (a) Revolving Loans to one of (vi) the U.S. Borrowers, jointly and severally, (wii) ~~Parent~~the Canadian Borrower, (xiii) ~~the~~ U.K. ~~Borrower~~, (y) ~~German Borrower~~

~~or (z) Swiss Borrower~~ Borrowers, on a several and not joint basis, (iv) the German Borrowers, on a several and not joint basis, (v) the Belgian Borrower, or (vi) the Swiss Borrowers, on a several and not joint basis, in each case of the same currency, Class, Sub-Class and Type, made, converted or continued on the same date and, in the case of Eurocurrency Loans and EURIBOR Loans, as to which a single Interest Period is in effect, or (b) a Swingline Loan. “**Borrowing Base**” shall mean the U.S. Borrowing Base, the Canadian Borrowing Base, the U.K. Borrowing Base, the Belgian Borrowing Base, each German Borrowing Base, ~~the~~each Swiss Borrowing Base and/or the Total Borrowing Base, as the context may require.

“**Borrowing Base Certificate**” shall mean an Officer’s Certificate from Administrative Borrower, substantially in the form of (or in such other form as may, from time to time, be mutually agreed upon by Administrative Borrower, Collateral Agent and Administrative Agent), and containing the information prescribed by Exhibit I, delivered to the Administrative Agent and the Collateral Agent setting forth the Administrative Borrower’s calculation of the Borrowing Base.

“**Borrowing Base Guarantor**” shall mean (a) as of the Closing Date, each Canadian Guarantor and (b) in addition thereafter, any other Wholly Owned Subsidiary of ~~Parent Borrower~~the Designated Company that (i) is organized in Canada or ~~Switzerland or~~ incorporated in England and Wales, (ii) is able to prepare all collateral reports in a comparable manner to the ~~Parent Borrowers’~~ reporting procedures of the Borrowers and (iii) has executed and delivered to Administrative Agent a joinder agreement hereto and such joinder agreements to guarantees, contribution and set-off agreements and other Loan Documents as Administrative Agent has reasonably requested (all of which shall be in form and substance acceptable to, and provide a level of security and guaranty acceptable to, Administrative Agent in its Permitted Discretion), so long as Administrative Agent has received and approved, in its Permitted Discretion, (A) a collateral audit conducted by an independent appraisal firm reasonably acceptable to Administrative Agent, (B) all UCC or other search results necessary to confirm Collateral Agent’s Lien on all of such Borrowing Base Guarantor’s personal property, subject to Permitted Liens, which Lien is a First Priority Lien with regard to the Revolving Credit Priority Collateral, and (C) such customary certificates (including a solvency certificate), resolutions, financial statements, legal opinions, and other documentation as the Administrative Agent may reasonably request (including as required by Sections 5.11 and 5.12).

“**Borrowing Base Loan Party**” shall have the meaning assigned to such term in Section 9.01.

“**Borrowing Request**” shall mean a request by a Borrower in accordance with the terms of Section 2.03 and substantially in the form of Exhibit C, or such other form as shall be approved by the Administrative Agent.

“**Brazilian Guarantor**” shall mean each Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in Brazil party hereto as a Guarantor, and each other Restricted

Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Brazil that ~~is required to become~~ becomes a Guarantor pursuant to the terms hereof.

“**Brazilian Security Agreements**” shall mean, collectively (i) any Security Agreements ~~substantially in the form of Exhibit M-7~~, including all subparts thereto, among ~~the any~~ Brazilian ~~Guarantor~~ Guarantors (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Brazilian Guarantor or any Person who is the holder of Equity Interests in any Brazilian Guarantor in favor of the Collateral

Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and (iii)~~ any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Brazil, securing the Secured Obligations, ~~in each case~~ and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Business Day**” shall mean any day other than a Saturday, Sunday or other day on which commercial banks are authorized to close under the laws of, or are in fact closed in, New York; provided, however, that when used in connection with notices and determinations in connection with, and payments of principal and interest on or with respect to, (a) a Eurocurrency Loan or EURIBOR Loan, the term “Business Day” shall also exclude any day on which banks are not open for dealings in Dollar deposits in the London interbank market, (b) an Alternate Currency Revolving Loan denominated in euros, the term “Business Day” shall also exclude any day that is not a TARGET Day (as determined in good faith by the Administrative Agent), and (c) a European Swingline Loan, the term “Business Day” shall mean any day other than a Saturday, Sunday or other day on which banks in Zurich are authorized or required by law to close.

“**Calculation Date**” shall have the meaning assigned to such term in the definition of “Senior Secured Net Leverage Ratio”.

“Canadian Borrower” shall have the meaning assigned to such term in the preamble hereto.

“**Canadian Borrowing Base**” shall mean at any time an amount equal to the sum of the Dollar Equivalent of, without duplication:

- (i) the book value of Eligible Canadian Accounts multiplied by the advance rate of 85%, plus
- (ii) the lesser of (i) the advance rate of 75% of the Cost of Eligible Canadian Inventory, or (ii) the advance rate of 85% of the Net Recovery Cost Percentage multiplied by the Cost of Eligible Canadian Inventory, minus
- (iii) any Reserves established from time to time by the Administrative Agent with respect to the Canadian Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement.

The Canadian Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the Canadian Borrowing Base is calculated in accordance with the terms of this Agreement.

“**Canadian Defined Benefit Plan**” shall mean any Canadian Pension Plan which contains a “defined benefit provision” as defined in subsection 147.1(l) of the Income Tax Act (Canada).

“**Canadian Dollar Denominated Letter of Credit**” shall have the meaning assigned to such term in Section 2.18.

“**Canadian Dollars**” or “**Can\$**” shall mean the lawful money of Canada.

“**Canadian Guarantor**” shall mean ~~Holdings~~ AV Metals (unless ~~Holdings~~ AV Metals is released as a Guarantor pursuant to Section 7.09 upon completion of a Qualified ~~Parent~~ Canadian Borrower IPO), ~~Parent~~ the Canadian Borrower and each Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Canada party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Canada that becomes ~~or is required to become~~ a Guarantor pursuant to the terms hereof.

“**Canadian Loan Party**” shall mean each of the ~~Parent~~ Canadian Borrower and each Canadian Guarantor.

“**Canadian Pension Plan**” shall mean each pension plan required to be registered under Canadian federal or provincial law which is maintained or contributed to by, or to which there is or may be an obligation to contribute by, any Borrower or Guarantor in respect of any Person’s employment in Canada with such Borrower or Guarantor, but does not include (a) the Canada Pension Plan or the Quebec Pension Plan as maintained by the Government of Canada or the Province of Quebec, respectively; or (b) plans to which any Borrower or Guarantor contributes which are not maintained or administered by the Borrower or Guarantor or any of its Affiliates.

“**Canadian Pension Plan Reserve**” means (a) employer contributions required to be made with respect to Canadian Defined Benefit Plans (including, for greater certainty, normal cost contributions and any special payments); and (b) any amounts representing any Canadian Wind Up Deficiency with respect to any Canadian Defined Benefit Plan, in each case to the extent that a trust or deemed trust to provide for payment or a

Lien capable of ranking prior to or pari passu with Liens serving the Obligations under Applicable Laws of Canada has been or may be imposed provided that the amount of the Priority Payables or Reserves established or maintained in respect of such required contributions or Canadian Wind Up Deficiency shall be calculated as follows (notice of which shall be provided to the ~~Borrower~~Designated Company):

(i) if a Wind Up Triggering Event has not occurred or has occurred and is not continuing, such amount as the Administrative Agent determines as reasonable and appropriate in the circumstances;

(ii) if a Wind Up Triggering Event has occurred and so long as the Wind Up Triggering Event is continuing or remains in effect, such amount shall be equal to an amount (not exceeding the amount of the related Canadian Wind Up Deficiency) as determined by the Administrative Agent in its Permitted Discretion, including after taking into account the type of Wind Up Triggering Event that has occurred and the jurisdiction of the affected Canadian Defined Benefit Plan; provided that to the extent that a Wind Up Triggering Event relates to a partial wind up or termination of a Canadian Defined Benefit Plan, the Canadian Wind Up Deficiency in respect of the non-wound up or non-terminated component of such Canadian Defined Benefit Plan shall not be included in such amount; and

(iii) an additional amount as determined by the ~~Borrower~~Designated Company in its sole discretion including to avoid a Lien coming into effect that may not otherwise be a Permitted Lien.

“**Canadian Pension Termination Event**” shall mean, with respect to any Canadian Defined Benefit Plan, the occurrence of a Wind Up Triggering Event, other than an event described in item (iv) of the definition of the term “Wind Up Triggering Event”.

“**Canadian Security Agreement**” shall mean, collectively (i) the Security Agreements ~~substantially in the form of Exhibit M-2~~, including all subparts thereto, among the Canadian Loan Parties (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, deed of hypothec, debenture, bond, security agreement, guarantee or other agreement that is entered into by any Canadian Loan Party or any Person who is the holder of Equity Interests in any Canadian Loan Party in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Canada (or any ~~subdivision~~province thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Canadian Wind Up Deficiency**” means, with respect to any Canadian Defined Benefit Plan, the amount representing the wind up deficiency or position with respect to a Canadian Defined Benefit Plan as reflected in the most recently filed actuarial valuation.

“**Capital Assets**” shall mean, with respect to any person, all equipment, fixed assets and Real Property or improvements of such person, or replacements or substitutions therefor or additions thereto, that, in accordance with U.S. GAAP, have been or should be reflected as additions to property, plant or equipment on the balance sheet of such person.

“**Capital Expenditures**” shall mean, for any period, without duplication, all expenditures made directly or indirectly by the ~~Parent~~ ~~Borrower~~Designated Company and its Restricted Subsidiaries during such period for the maintenance, refurbishment, renovation, replacement or restoration of Capital Assets in the ordinary course of business of the ~~Parent~~ ~~Borrower~~Designated Company and its Restricted Subsidiaries, in each case to the extent capitalized in accordance with U.S. GAAP, as detailed to the Administrative Agent (whether paid in cash or other consideration, financed by the incurrence of Indebtedness or accrued as a liability), together with the ~~Parent Borrower's~~Designated Company's proportionate share of such amounts for Norf GmbH for such period, but in each case excluding (solely for purposes of determining Consolidated Fixed Charge Coverage Ratio) any portion of such expenditures paid for with insurance proceeds.

“**Capital Lease Obligations**” of any person shall mean the obligations of such person to pay rent or other amounts under any lease of (or other arrangement conveying the right to use) real or personal property, or a combination thereof, which obligations are required to be classified and accounted for as capital leases on a balance sheet of such person under U.S. GAAP, and the amount of such obligations shall be the capitalized amount thereof determined in accordance with U.S. GAAP. It is understood that with respect to the accounting for leases as either operating leases or capital leases and the impact of such accounting on the definitions and covenants herein, U.S. GAAP as in effect on the Closing Date shall be applied.

“**Cash Collateral Account**” shall mean a collateral account in the form of a deposit account established and maintained by the Collateral Agent for the benefit of the Secured Parties.

“**Cash Dominion Recovery Event**” shall mean, with respect to any Cash Dominion Trigger Event at any time (a) no Default or Event of Default shall have been outstanding for a period of thirty (30) consecutive days then ended and (b) Excess Availability shall be at least the greater of (i) \$90,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 10.0% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base, for a period of thirty (30) consecutive days then ended.

“**Cash Dominion Trigger Event**” shall mean at any time (a) an Event of Default shall have occurred and is continuing and/or (b) Excess Availability shall for a period of three (3) consecutive Business Days be less than the greater of (i) \$90,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 10.0% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base and/or (c) in the sole discretion of the Administrative Agent, if Excess Availability shall at any time be less than 7.5% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base.

“**Cash Equivalents**” shall mean, as to any person, (a) securities issued or fully guaranteed or insured by the federal government of the United States, Canada, Switzerland, any Approved Member State or any agency of the foregoing, (b) marketable direct obligations issued by Canada or any province thereof, any state of the United States or the District of Columbia or any political subdivision, government-sponsored entity or instrumentality thereof that, at the time of the acquisition, are rated at least “A-2” by S&P, “P-2” by Moody’s or in the “R-2” category by the Dominion Bond Rating Service Limited, (c) certificates of deposit, Eurocurrency time deposits, overnight bank deposits and bankers’ acceptances of any commercial bank or trust company organized under the laws of Canada or any province thereof, the United States, any state thereof, the District of Columbia, any non-U.S. bank, or its branches or agencies (fully protected against currency fluctuations) that, at the time of acquisition, is rated at least “A-2” by S&P, “P-2” by Moody’s or in the “R-2” category by the Dominion Bond Rating Service Limited, (d) commercial paper of an issuer rated at least “A-2” by S&P, “P-2” by Moody’s or in the “R-2” category by the Dominion Bond Rating Service Limited, and (e) shares of any money market fund that (i) has at least 95% of its assets invested continuously in the types of investments referred to in clauses (a), (b) and (c) above, (ii) has net assets, the Dollar Equivalent of which exceeds \$500,000,000 and (iii) is rated at least “A-2” by S&P, “P-2” by Moody’s or in the “R-2” category by the Dominion Bond Rating Service Limited; provided, however, that the maturities of all obligations of the type specified in clauses (a), (b) and (c) above shall not exceed 365 days; provided, further, that, to the extent any cash is generated through operations in a jurisdiction outside of the United States, Canada, Switzerland or an Approved Member State, such cash may

be retained and invested in obligations of the type described in clause (a), (c) or (d) applicable to such jurisdiction to the extent that such obligations are customarily used in such other jurisdiction for short term cash management purposes.

“**Cash Management Services**” shall mean any cash management or related services provided from time to time by any Lender or any of its Affiliates to any Company in connection with operating, collections, payroll, trust, or other depository or disbursement accounts, treasury, depository, return items, merchant store value cards, including automated clearinghouse, ~~epayable transfer (including the Automated Clearing House processing of electronic funds transfers through the direct Federal Reserve Fedline system), e-payables services, interstate depository network,~~ electronic funds transfer, wire transfer, controlled disbursement, overdraft, depository, information reporting, lockbox and stop payment services, and other cash management arrangements.

“**Cash Management System**” shall have the meaning assigned to such term in Section 9.01.

“**Cash Pooling Arrangements**” shall mean (i) the DB Cash Pooling Arrangement and the ~~Novelis-AG~~European Cash Pooling Agreement and (ii) any other cash pooling arrangements (including, without limitation, any notional cash pool arrangements, in each case, including all documentation pertaining thereto), entered into by any Company in accordance with Section 6.07.

“**Casualty Event**” shall mean any involuntary loss of title, any involuntary loss of, damage to or any destruction of, or any expropriation, condemnation or other taking (including by any Governmental Authority) of, any property of Holdings, the ~~Parent Borrower~~Designated Company, or any of its Restricted Subsidiaries. “Casualty Event” shall include but not be limited to any taking of all or any part of any Real Property of any person or any part thereof, in or by expropriation, condemnation or other eminent domain proceedings pursuant to any requirement of Applicable Law, or by reason of the temporary requisition of the use or occupancy of all or any part of any Real Property of any person or any part thereof by any Governmental Authority, civil or military, or any settlement in lieu thereof.

“**CERCLA**” shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601 et seq. and all implementing regulations.

A “**Change in Control**” shall be deemed to have occurred if:

(a) ~~At any time (i) prior to a Qualified IPO the Designated Holdco Effective Date,~~ Hindalco ceases to be the Beneficial Owner of Voting Stock representing more than 50% of the voting power of the total outstanding Voting Stock of Holdings; ~~(ii) on and after the Designated Holdco Effective Date, Hindalco ceases to be the Beneficial Owner of Voting Stock representing more than 50% of the voting power of the total outstanding Voting Stock of each of Holdings and Designated Holdco, or (iii) on and after the Designated Holdco Effective Date, Holdings ceases to be the Beneficial Owner of Voting Stock representing 100% of the voting power of the total outstanding Voting Stock of Designated Holdco;~~

(b) ~~At any time prior to a Qualified Parent Borrower IPO;~~ Holdings (or, on and after the Designated Holdco Effective Date, Designated Holdco) at any time ceases to be the Beneficial Owner and the direct or indirect record owner of 100% of the Equity Interests of ~~Parent Borrower;~~ provided the Canadian Borrower, except as a result of a Qualified Canadian Borrower IPO; provided that Hindalco continues to be the Beneficial Owner of Voting Stock representing more than 50% of the voting power of the total outstanding Voting Stock of the Canadian Borrower at all times after giving effect to such Qualified Canadian Borrower IPO; and provided, further, that a Permitted Holdings Amalgamation shall not constitute a Change in Control;

(c) ~~Parent Borrower~~the Designated Company, at any time ceases to be the Beneficial Owner and the direct or indirect owner of 100% of the Equity Interests of any other Borrower (other than the Canadian Borrower prior to the Designated Holdco Effective Date, and the Designated Company on and after the Designated Holdco Effective Date);

(d) at any time a change in control (or change of control or similar event) with respect to the ~~Parent~~Designated Holdco, the Canadian Borrower or, Novelis Corporation, Novelis Acquisitions, or on and after the Aleris Acquisition Closing Date after giving effect to the Aleris

Acquisition, Aleris, occurs under (and as defined in) any Material Indebtedness of any Loan Party;

(e) (i) at any time after a Qualified IPO (other than a Qualified ~~Parent~~Canadian Borrower IPO), any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act) other than the Specified Holders is or becomes the Beneficial Owner (provided that for purposes of this clause (except as set forth below) such person or group shall be deemed to have Beneficial Ownership of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time) of Voting Stock of Holdings (or, at any time after a Qualified IPO of U.K. Holdco, U.K. Holdco) representing 35% or more of the voting power of the total outstanding Voting Stock of Holdings (or, at any time after a Qualified IPO of U.K. Holdco, U.K. Holdco) unless the Specified Holders at all times Beneficially Own Voting Stock of Holdings (or, at any time after a Qualified IPO of U.K. Holdco, U.K. Holdco) representing greater voting power of the total outstanding Voting Stock of Holdings (or, at any time after a Qualified IPO of U.K. Holdco, U.K. Holdco) than such voting power held by such person or group; or (ii) at any time after a Qualified ~~Parent~~Canadian Borrower IPO, any “person” or “group” (as such terms are used in Sections 13(d) and 14(d) of the Exchange Act) other than the Specified Holders is or becomes the Beneficial Owner (provided that for purposes of this clause (except as set forth below) such person or group shall be deemed to have Beneficial Ownership of all securities that such person or group has the right to acquire, whether such right is exercisable immediately or only after the passage of time) of Voting Stock of ~~Parent~~the Canadian Borrower representing 35% or more of the voting power of the total outstanding Voting Stock of ~~Parent~~the Canadian Borrower unless the Specified Holders at all times Beneficially Own Voting Stock of ~~Parent~~the Canadian Borrower representing greater voting power of the total outstanding Voting Stock of ~~Parent~~the Canadian Borrower than such voting power held by such person or group; or

(f) during any period of two consecutive years, individuals who at the beginning of such period constituted the Board of Directors of Holdings ~~or Parent~~, any Borrower or, on and after the Designated Holdco Effective Date, Designated Holdco (together with any new directors whose election to such Board of Directors or whose nomination for election was approved by the Specified Holders or by a vote of at least a majority of the members of the Board of Directors of ~~Holdings or Parent Borrowers~~such Person, as the case may be, which members comprising such majority are then still in office and were either directors at the beginning of such period or whose election or nomination for election was previously so approved) cease for any reason to constitute a majority of the Board of Directors of ~~Holdings or Parent Borrowers~~such Person.

For purposes of this definition, a person shall not be deemed to have Beneficial Ownership of Equity Interests subject to a stock purchase agreement, merger agreement or similar agreement until the consummation of the transactions contemplated by such agreement.

“**Change in Law**” shall mean the occurrence, after the Existing Credit Agreement Closing Date, of any of the following: (a) the adoption or taking into effect of any law, treaty, order, policy, rule or regulation, (b) any change in any law, treaty, order, policy, rule or regulation or in the administration, interpretation or application thereof by any Governmental Authority or (c) the making or issuance of any request, guideline or directive (whether or not having the force of law) by any Governmental Authority; provided, however, that notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, regulations, guidelines or directives thereunder or issued in connection therewith, and (ii) all requests, rules, regulations, guidelines, requirements and directives promulgated or issued by the Bank for International Settlements, the Basel Committee on Banking Supervision (or any successor or similar authority) or the United States or foreign regulatory authorities, in each case pursuant to Basel III, shall be deemed to be a “Change in Law”, regardless of the date enacted, adopted or issued.

“**Chattel Paper**” shall mean all “chattel paper,” as such term is defined in the UCC, in which any Person now or hereafter has rights.

“**Chief Executive Office**” shall mean, with respect to any Person, the location from which such Person manages the main part of its business operations or other affairs.

“**Chinese Subsidiary Equity Interests**” shall mean all Equity Interests of each Person organized under the laws of the People’s Republic of China that is a Subsidiary of a Loan Party, in each case that is owned by a Loan Party.

“**Claim**” shall mean all liabilities, obligations, losses, damages, penalties, judgments, proceedings, interest, costs and expenses of any kind (including remedial response costs, reasonable attorneys’ fees and Extraordinary Expenses) at any time (including after Full Payment of the Secured Obligations, resignation or replacement of any Agent, or replacement of any Lender) incurred by or asserted against any Indemnitee in any way relating to (a) any Loans, Letters of Credit, Loan Documents, or the use thereof or transactions relating thereto, (b) any action taken or omitted to be taken by any Indemnitee in connection with any Loan Documents, (c) the existence or perfection of any Liens, or realization upon any Collateral, (d) exercise of any rights or remedies under any Loan Documents or Applicable Law, ~~or~~ (e) any actual or alleged presence or Release or threatened Release of Hazardous Materials on, at, under or from any property owned, leased or operated by any Company at any time, or any Environmental

Claim related in any way to any Company, or (f) failure by any Loan Party to perform or observe any terms of any Loan Document, in each case including all costs and expenses relating to any investigation, litigation, arbitration or other proceeding (including an Insolvency Proceeding or appellate proceedings), whether or not the applicable Indemnitee is a party thereto.

“**Class**,” when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Revolving Loans or European Swingline Loans and, when used in reference to any Commitment, refers to whether such Commitment is a Revolving Commitment or European Swingline Commitment, in each case, under this Agreement as originally in effect or pursuant to Section 2.23, of which such Loan, Borrowing or Commitment shall be a part.

“**Closing Date**” shall mean the date on which the conditions set forth in Article IV are satisfied or duly waived. The Closing Date occurred on October 6, 2014.

“**Code**” shall mean the Internal Revenue Code of 1986, as amended and the Treasury Regulations promulgated thereunder.

“**Collateral**” shall mean, all of the “Collateral”, “Pledged Collateral” and “Mortgaged Property” referred to in the Security Documents and all of the other property that is or is intended under the terms of the Security Documents to be subject to Liens in favor of the Collateral Agent for the benefit of the Secured Parties.

“**Collateral Agent**” shall have the meaning assigned to such term in the preamble hereto and includes each other person appointed as the successor pursuant to ARTICLE X.

“**Collection Account**” has the meaning assigned to such term in Section 9.01(c).

“**Commercial Letter of Credit**” shall mean any letter of credit or similar instrument issued for the purpose of providing credit support in connection with the purchase of materials, goods or services by ~~Parent Borrower~~the Designated Company or any of its Subsidiaries in the ordinary course of their businesses.

“**Commitment**” shall mean, with respect to any Lender, such Lender’s Revolving Commitment and/or European Swingline Commitment, including any Commitment pursuant to Section 2.23, and, prior to the Specified Incremental Commitment Availability Date, such Lender’s Specified Incremental Commitment.

“**Commitment Fee**” shall have the meaning assigned to such term in Section 2.05(a).

“**Commodity Exchange Act**” means the Commodity Exchange Act (7 U.S.C. § 1 et seq.), as amended from time to time, and any successor statute.

“**Communications**” shall have the meaning assigned to such term in Section 11.01(d).

“**Companies**” shall mean Holdings (unless Holdings has been released as a Guarantor pursuant to Section 7.09(d)), the ~~Parent Borrower and its~~Designated Company and Holdings’ (or, if Holdings has been released as a Guarantor pursuant to Section 7.09(d), the Designated Company’s) Restricted Subsidiaries; and “**Company**” shall mean any one of them.

“**Compensation Plan**” shall mean any program, plan or similar arrangement (other than employment contracts for a single individual) relating generally to compensation, pension, employment or similar arrangements with respect to which any Company, any Affiliate of any Company or any ERISA Affiliate of any of them has any obligation or liability, contingent or otherwise, under any Applicable Law other than that of the United States.

“**Compliance Certificate**” shall mean a certificate of a Financial Officer of the Designated Company substantially in the form of Exhibit D.

“**Concentration Account**” shall have the meaning assigned to such term in Section 9.01(c).

“**Concentration Account Bank**” shall have the meaning assigned to such term in Section 9.01(c).

“**Confidential Information Memorandum**” shall mean that certain confidential information memorandum of the ~~Parent Borrower~~Designated Company, dated ~~September 2014~~February, 2019.

“**Consolidated Amortization Expense**” shall mean, for any period, the amortization expense of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries for such period, determined on a consolidated basis in accordance with U.S. GAAP.

“**Consolidated Current Liabilities**” shall mean, as at any date of determination, the total liabilities of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries which may properly be classified as current liabilities (other than the current portion of any Loans) on a consolidated balance sheet of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries in accordance with U.S. GAAP, but excluding (a) the current portion of any Funded Debt of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries and (b) without duplication of clause (a) above, all Indebtedness consisting of Loans to the extent otherwise included therein.

“**Consolidated Depreciation Expense**” shall mean, for any period, the depreciation expense of ~~Parent Borrower~~the Designated Company and its Restricted Subsidiaries for such period, determined on a consolidated basis in accordance with U.S. GAAP.

“**Consolidated EBITDA (Fixed Charge)**” shall mean, for any period, the sum of (A) Consolidated Net Income (Fixed Charge) for such period, adjusted by (without duplication):

(x) adding thereto, in each case only to the extent (and in the same proportion) deducted in determining such Consolidated Net Income and without duplication:

- (a) Consolidated Interest Expense for such period,
- (b) Consolidated Amortization Expense for such period,
- (c) Consolidated Depreciation Expense for such period,
- (d) Consolidated Tax Expense for such period,
- (e) non-recurring cash expenses and charges relating to the Transactions to the extent paid on or about the Closing Date,
- (f) restructuring charges in an amount not to exceed ~~\$15,000,000~~ 25,000,000 in the aggregate during any four consecutive fiscal quarters;
- (g) solely in connection with the Aleris Acquisition, the business of Aleris and its Subsidiaries, or the Permitted Reorganization, during the five consecutive fiscal quarter period commencing with the fiscal quarter in which the Aleris Acquisition Closing Date occurs, non-recurring items or unusual charges or expenses, severance, relocation costs or expenses, other business optimization expenses (including costs and expenses relating to business optimization programs), new systems design and implementation costs, project start-up costs, restructuring charges or reserves, and/or costs related to the closure and/or consolidation of facilities, in the case of all of the foregoing, in an aggregate amount not to exceed \$100,000,000;
- (h) the aggregate amount of all other non-cash charges reducing Consolidated Net Income (excluding any non-cash charge that results in an accrual of a reserve for cash charges in any future period) for such period; and
- (i) the amount of net income (loss) attributable to non-controlling interests deducted (and not added back) in computing Consolidated Net Income (Fixed Charge);
- (y) subtracting therefrom, the aggregate amount of all non-cash items increasing Consolidated Net Income (Fixed Charge) (other than the accrual of revenue or recording of receivables in the ordinary course of business) for such period; and
- (z) excluding therefrom,
 - (a) any gain (or loss), together with any related provisions for taxes on any such gain (or the tax effect of any such loss), realized during such period by the ~~Parent-Borrower~~ Designated Company or any of its Restricted Subsidiaries upon any Asset Sale (other than any dispositions in the ordinary course of business) by the ~~Parent-Borrower~~ Designated Company or any of its Restricted Subsidiaries,
 - (b) any gain or loss relating to cancellation or extinguishment of Indebtedness,
 - (c) earnings or losses resulting from any reappraisal, revaluation or write-up or write-down of assets (other than write-downs of Inventory), including any changes resulting from the effects of adjustments in the property, plant and equipment, inventories, goodwill, intangible assets and debt line items in the Designated Company's
consolidated financial statements pursuant to U.S. GAAP resulting from the application of purchase accounting in relation to any acquisition or the amortization or write-off of any amounts thereof.
 - (d) any one-time increase or decrease to net income that is required to be recorded because of the adoption of new accounting policies, practices or standards required by GAAP, and
 - (e) unrealized gains and losses with respect to Hedging Obligations for such period (other than any unrealized gains or losses resulting from foreign currency remeasurement hedging activities).
- plus (B) the proportionate interest of the ~~Parent-Borrower~~ Designated Company and its consolidated Restricted Subsidiaries in ~~non-consolidated~~ Non-consolidated Affiliate EBITDA for such period.

Consolidated EBITDA (Fixed Charge) shall be calculated on a Pro Forma Basis to give effect to any Acquisition and Asset Sales (other than any dispositions in the ordinary course of business, dispositions where the value of the assets disposed of is less than \$15,000,000 and Permitted Acquisitions where the amount of the Acquisition Consideration plus any Equity Interests constituting all or a portion of the purchase price is less than \$15,000,000) consummated at any time on or after the first day of the Test Period thereof as if each such Permitted Acquisition had been effected on the first day of such period and as if each such Asset Sale had been consummated on the day prior to the first day of such period.

Consolidated EBITDA (Fixed Charge) shall not include the Consolidated EBITDA (Fixed Charge) of any Non-consolidated Affiliate if such Non-consolidated Affiliate is subject to a prohibition, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to the Borrower, to the extent of such prohibition.

“**Consolidated EBITDA (Leverage)**” shall mean (subject to Section 11.02(k)), for any period, the sum of (A) Consolidated Net Income (Leverage) for such period, adjusted by (without duplication):

(x) adding thereto, in each case only to the extent (and in the same proportion) deducted in determining such Consolidated Net Income (Leverage) and without duplication:

- (a) Consolidated Interest Expense for such period,
- (b) Consolidated Amortization Expense for such period,
- (c) Consolidated Depreciation Expense for such period,
- (d) Consolidated Tax Expense for such period,
- (e) ~~(+)~~ non-recurring items or unusual charges or expenses, severance, relocation costs or expenses, other business optimization expenses (including costs and expenses relating to business optimization programs), new systems design and implementation costs, project start-up costs, restructuring charges or reserves, costs related to the closure and/or consolidation of facilities and onetime costs associated with a Qualified IPO ~~and (ii)~~,
- (f) to the extent covered by insurance and actually reimbursed or, so long as the Designated Company has made a good faith determination that there exists reasonable evidence that such amount will in fact be reimbursed by the insurer and only to the extent that such amount is (x) not denied by the applicable carrier in writing within 180 days and (y) in fact reimbursed within 365 days of the date of such evidence (with a deduction for any amount so added back to the extent not so reimbursed within 365 days), losses and expenses with respect to Casualty Events or business interruption,
- (g) the aggregate amount of all other non-cash charges reducing Consolidated Net Income (Leverage) (excluding any non-cash charge that results in an accrual of a reserve for cash charges in any future period) for such period,
- (h) the amount of net income (loss) attributable to non-controlling interests deducted (and not added back) in computing Consolidated Net Income (Leverage), and
- (i) Management Fees paid in compliance with Section 6.08(c);
- (y) subtracting therefrom, (a) the aggregate amount of all non-cash items increasing Consolidated Net Income (Leverage) (other than the accrual of revenue or recording of receivables in the ordinary course of business) for such period and (b) interest income; and
- (z) excluding therefrom,
 - (a) [intentionally omitted]
 - (b) earnings or losses resulting from any reappraisal, revaluation or write-up or write-down of assets;
 - (c) non-recurring or unusual gains; and
 - (d) any gain or loss relating to cancellation or extinguishment of Indebtedness;

plus (B) the proportionate interest of the Designated Company and its consolidated Restricted Subsidiaries in Non-consolidated Affiliate EBITDA for such period;

plus (C) the annualized amount of net cost savings, operating expense reductions and synergies reasonably projected by the ~~Parent Borrower~~ Designated Company, in good faith to be realized as a result of specified actions (x) taken since the beginning of the Test Period in respect of which Consolidated EBITDA (Leverage) is being determined or (y) initiated prior to or during the Test Period (in each case, which cost savings shall be added to Consolidated EBITDA (Leverage) until fully realized, but in no event for more than four fiscal quarters) (calculated on a pro forma basis as though such annualized cost savings, operating expense reductions and synergies had been realized on the first day of such Test Period, net of the amount of actual benefits realized during such Test Period from such actions); provided that ~~(A1)~~ such cost savings, operating expense reductions and synergies are reasonably identifiable, quantifiable and factually supportable in the good faith judgment of the ~~Parent Borrower~~ Designated Company, and ~~(B2)~~ no cost savings, operating expense reductions and synergies shall be added pursuant to this clause ~~(eC)~~ to the extent duplicative of any expenses or charges otherwise added to Consolidated EBITDA (Leverage), whether through a pro forma adjustment or otherwise, for such Test Period; provided that the aggregate amount added to Consolidated EBITDA (Leverage) pursuant to this clause ~~(eC)~~ shall not exceed in the aggregate ~~40~~ 15% of Consolidated EBITDA (Leverage) for any one Test Period; provided, further that projected (and not yet realized) amounts may no longer be added in calculating Consolidated EBITDA (Leverage) pursuant to this clause ~~(ii) of this paragraph (eC)~~ to the extent occurring more than four full fiscal quarters after the specified action taken or initiated in order to realize such projected cost savings, operating expense reductions and synergies;

~~(+)~~ [intentionally omitted]

(g) ~~the aggregate amount of all other non-cash charges reducing Consolidated Net Income (Leverage) (excluding any non-cash charge that results in an accrual of a reserve for cash charges in any future period) for such period; and~~

(h) ~~the amount of net income (loss) attributable to non-controlling interests deducted (and not added back) in computing Consolidated Net Income (Leverage); and~~

(i) ~~Management Fees paid in compliance with Section 6.08(c);~~

~~(y) subtracting therefrom, (a) the aggregate amount of all non-cash items increasing Consolidated Net Income (Leverage) (other than the accrual of revenue or recording of receivables in the ordinary course of business) for such period and (b) interest income; and~~

~~(z) excluding therefrom;~~

~~(a) gains and losses due solely to fluctuations in currency values of noncurrent assets and liabilities, realized gains and losses on currency derivatives related to such non-current assets and liabilities determined in accordance with U.S. GAAP for such period;~~

~~(b) earnings or losses resulting from any reappraisal, revaluation or write-up or write-down of assets;~~

~~(c) non-recurring or unusual gains; and~~

~~(d) any gain or loss relating to cancellation or extinguishment of Indebtedness;~~

~~plus (B) the proportionate interest of the Parent Borrower and its consolidated Restricted Subsidiaries in Non-consolidated Affiliate EBITDA for such period.~~

Notwithstanding the foregoing clause (x), the provision for taxes and the depreciation, amortization and non-cash items of a Restricted Subsidiary shall be added to Consolidated Net Income (Leverage) to compute Consolidated EBITDA (Leverage) only to the extent (and in the same proportion) that the net income of such Restricted Subsidiary was included in calculating Consolidated Net Income (Leverage).

Consolidated EBITDA (Leverage) shall not include the Consolidated EBITDA (Leverage) of any Non-consolidated Affiliate if such Non-consolidated Affiliate is subject to a prohibition, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to the Designated Company or any other Borrower, to the extent of such prohibition.

“**Consolidated Fixed Charge Coverage Ratio**” shall mean, for any Test Period, the ratio of (a) (i) Consolidated EBITDA (Fixed Charge) for such Test Period minus (ii) the aggregate amount of Capital Expenditures for such period minus (iii) all cash payments in respect of income taxes (including all taxes imposed on or measured by overall net income (however denominated), and franchise taxes imposed in lieu of net income taxes) made during such period (net of any cash refund in respect of income taxes actually received during such period) to (b) Consolidated Fixed Charges for such Test Period.

“**Consolidated Fixed Charges**” shall mean, for any period, the sum, without duplication, of:

(a) Consolidated Interest Expense payable in cash for such period;

(b) the principal amount of all scheduled amortization payments on all Indebtedness (including the principal component of all Capital Lease Obligations) and the principal amount of all mandatory prepayments of all Indebtedness of the ~~Parent Borrower~~ Designated Company and its Restricted Subsidiaries based on excess cash flow of ~~Parent Borrower~~ the Designated Company and its Restricted Subsidiaries for such period;

(c) Dividends paid in cash pursuant to Section 6.08(c) or (i); and

(d) Management Fees (except to the extent such payments reduce Consolidated Net Income (Fixed Charge)).

“**Consolidated Interest Coverage Ratio**” shall mean, for any period, the ratio of (a) Consolidated EBITDA (Leverage) for such period to (b) Consolidated Interest Expense for such period.

“**Consolidated Interest Expense**” shall mean, for any period, the total consolidated interest expense of ~~Parent Borrower~~ the Designated Company and its Restricted Subsidiaries for such period determined on a consolidated basis in accordance with U.S. GAAP plus, without duplication:

(a) imputed interest on Capital Lease Obligations and Attributable Indebtedness of ~~Parent Borrower~~ the Designated Company and its Restricted Subsidiaries for such period;

(b) commissions, discounts and other fees and charges owed by ~~Parent Borrower~~ the Designated Company or any of its Restricted Subsidiaries with respect to letters of credit securing financial obligations, bankers' acceptance financing and receivables financings for

such period;

(c) amortization of debt issuance costs, debt discount or premium and other financing fees and expenses incurred by ~~Parent Borrower~~the Designated Company or any of its Restricted Subsidiaries for such period;

(d) all interest paid or payable with respect to discontinued operations of ~~Parent Borrower~~the Designated Company or any of its Restricted Subsidiaries for such period; and

(e) the interest portion of any deferred payment obligations of ~~Parent Borrower~~the Designated Company or any of its Restricted Subsidiaries for such period.

“Consolidated Net Income (Fixed Charge)” shall mean, for any period, the consolidated net income (or loss) of ~~Parent Borrower~~the Designated Company and its Restricted Subsidiaries determined on a consolidated basis in accordance with U.S. GAAP; provided, however, that:

(a) the net income (or loss) of any person in which any person other than the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries has an ownership interest (which interest does not cause the net income of such other person to be consolidated into the net income of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries) shall be excluded, except to the extent actually received by the ~~Parent Borrower~~Designated Company or any of its Restricted Subsidiaries during such period; and

(b) the net income (or loss) of any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company other than a Loan Party that is subject to a prohibition on the payment of dividends or similar distributions by such Restricted Subsidiary shall be excluded to the extent of such prohibition, except the aggregate amount of cash distributed by such Restricted Subsidiary during such period to the ~~Parent Borrower~~Designated Company or another Restricted Subsidiary as a dividend or other distribution.

For purposes of this definition of **“Consolidated Net Income (Fixed Charge)”**, Consolidated Net Income shall be reduced (to the extent not already reduced thereby) by the amount of any payments to or on behalf of Holdings made pursuant to Section 6.08(c).

“Consolidated Net Income (Leverage)” shall mean (subject to Section 11.02(k)), for any period, the consolidated net income (or loss) of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries determined on a consolidated basis in accordance with U.S.

GAAP; provided, however, that the following shall be excluded in the calculation of **“Consolidated Net Income (Leverage)”**:

(a) any net income (loss) of any person (other than the ~~Parent Borrower~~Designated Company) if such person is not a Restricted Subsidiary of the ~~Parent Borrower~~Designated Company, except that:

(i) subject to the exclusion contained in clause (c) below, equity of the ~~Parent Borrower~~Designated Company and its consolidated Restricted Subsidiaries in the net income of any such person for such period shall be included in such Consolidated Net Income (Leverage) up to the aggregate amount of cash distributed by such person during such period to the ~~Parent Borrower~~Designated Company or to a Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to a Restricted Subsidiary, to the limitations contained in clause (b), below); and

(ii) the equity of the ~~Parent Borrower~~Designated Company and its consolidated Restricted Subsidiaries in a net loss of any such person other than an Unrestricted Subsidiary for such period shall be included in determining such Consolidated Net Income (Leverage);

(b) any net income (loss) of any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company if such Restricted Subsidiary is subject to a prohibition, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to the ~~Parent~~Designated Company or any other Borrower, to the extent of such prohibition, except that:

(i) subject to the exclusion contained in clause (c) below, equity of the ~~Parent Borrower~~Designated Company and its consolidated Restricted Subsidiaries in the net income of any such person for such period shall be included in such Consolidated Net Income (Leverage) up to the aggregate amount of cash distributed by such Restricted Subsidiary during such period to the ~~Parent Borrower~~Designated Company or another Restricted Subsidiary as a dividend or other distribution (subject, in the case of a dividend or other distribution to a Restricted Subsidiary, to the limitations contained in this clause (b)); and

(ii) the equity of the ~~Parent Borrower~~Designated Company and its consolidated Restricted Subsidiaries in a net loss of any such person other than an Unrestricted Subsidiary for such period shall be included in determining such Consolidated Net Income (Leverage);

(c) any gain or loss realized upon the sale or other disposition of any property of the ~~Parent Borrower~~Designated Company or Restricted Subsidiaries (including pursuant to any Sale and Leaseback Transaction) that is not sold or otherwise disposed of in the ordinary course of business (provided that sales or other dispositions of assets in connection with any Qualified Securitization Transaction permitted hereunder shall be deemed to be in the ordinary course);

(d) any extraordinary gain or loss;

(e) the cumulative effect of a change in accounting principles;

(f) any non-cash compensation expense realized for grants of performance shares, stock options or other rights to officers, directors and employees of the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary; provided that such shares, options or other rights can be redeemed at the option of the holders only for Qualified Capital Stock of the ~~Parent Borrower~~Designated Company or Holdings;

(g) any unrealized gain or loss resulting in such period from “Hedging Obligations” (as defined in the Term Loan Credit Agreement) or any similar term in any Term Loan Credit Agreement Refinancing Indebtedness (other than any unrealized gains or losses resulting from foreign currency re-measurement hedging activities);

(h) any expenses or charges in such period related to the Transactions and any acquisition, disposition, recapitalization or the incurrence of any Indebtedness permitted hereunder, including such fees, expenses or charges related to the Transactions; and

(i) the effects of adjustments in the property, plant and equipment, inventories, goodwill, intangible assets and debt line items in the ~~Parent Borrower's~~Designated Company's consolidated financial statements pursuant to U.S. GAAP resulting from the application of purchase accounting in relation to any acquisition or the amortization or write-off of any amounts thereof, net of taxes.

“**Consolidated Net Tangible Assets**” shall mean (subject to Section 11.02(k)), as of any date of determination, the sum of the amounts that would appear on a consolidated balance sheet of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries as the total assets (less accumulated depreciation and amortization, allowances for doubtful receivables, other applicable reserves and other properly deductible items) of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries, after giving effect to purchase accounting and after deducting therefrom Consolidated Current Liabilities and, to the extent otherwise included, the amounts of (without duplication):

(a) the excess of cost over fair market value of assets or businesses acquired;

(b) any revaluation or other write-up in book value of assets subsequent to September 30, 2010, as a result of a change in the method of valuation in accordance with U.S. GAAP;

(c) unamortized debt discount and expenses and other unamortized deferred charges, goodwill, patents, trademarks, service marks, trade names, copyrights, licenses, organization or developmental expenses and other intangible items;

(d) minority interests in consolidated Subsidiaries held by Persons other than the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company;

(e) treasury stock;

(f) cash or securities set aside and held in a sinking or other analogous fund established for the purpose of redemption or other retirement of Equity Interests to the extent such obligation is not reflected in Consolidated Current Liabilities; and

(g) Investments in and assets of Unrestricted Subsidiaries.

“**Consolidated Tax Expense**” shall mean, for any period, the tax expense of ~~Parent Borrower~~the Designated Company and its Restricted Subsidiaries, for such period, determined on a consolidated basis in accordance with U.S. GAAP.

“**Consolidated Total Assets**” shall mean at any date of determination, the total assets of ~~Parent Borrower~~the Designated Company and its Restricted Subsidiaries, determined on a consolidated basis in accordance with U.S. GAAP.

“**Consolidated Total Net Debt**” shall mean, as of any date of determination and without duplication, the sum of (A) the aggregate principal amount of Indebtedness of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries outstanding on such date of the type referenced in clauses (a), (b) and (f) of the definition of Indebtedness, and any Contingent Obligations of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries in respect of Indebtedness of any Person under clauses (a), (b) and (f) of the definition of Indebtedness, minus the aggregate amount of Unrestricted Cash on such date, plus (B) the proportionate interest of the ~~Parent Borrower~~Designated Company and its consolidated Restricted Subsidiaries in the Non-consolidated Affiliate Debt of each of the Non-consolidated Affiliates at any date of determination. The aggregate principal amount of such Indebtedness shall be determined according to the face or principal amount thereof, based on the amount owing under the applicable contractual obligation (without regard to any election by the ~~Parent Borrower~~Designated Company, Holdings or any other Person to measure an item of Indebtedness using fair value or any other discount that may be applicable under U.S. GAAP (including the effects of FASB ASC 825 and FASB ASC 470-20 on financial liabilities) on a consolidated basis with respect to the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries in accordance with consolidation principles utilized in U.S. GAAP.

“**Contingent Obligation**” shall mean, as to any person, any obligation, agreement, understanding or arrangement of such person guaranteeing or intended to guarantee any Indebtedness, leases, dividends or other obligations (“**primary obligations**”) of any other person (the “**primary obligor**”) in any manner, whether directly or indirectly, including any obligation of such person, whether or not contingent, (a) under any guaranty, endorsement, co-making or sale with recourse of ~~any~~any obligation of a primary obligor; (b) to purchase any such primary obligation or any property constituting direct or indirect security therefor; (c) to advance or supply funds (i) for the purchase or payment of any such primary obligation or (ii) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency of the

primary obligor; (d) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation; (e) with respect to bankers' acceptances, letters of credit and similar credit arrangements, until a reimbursement obligation arises (which reimbursement obligation shall constitute Indebtedness); or (f) otherwise to assure or hold harmless the holder of such primary obligation against loss in respect thereof; provided, however, that the term "Contingent Obligation" shall not include endorsements of instruments for deposit or collection in the ordinary course of business or any product warranties. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determinable amount of the primary obligation in respect of which such Contingent Obligation is made (or, if less, the maximum amount of such primary obligation for which such person may be liable, whether singly or jointly, pursuant to the terms of the instrument evidencing such Contingent Obligation) or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof (assuming such person is required to perform thereunder) as determined by such person in good faith.

"Contribution, Intercompany, Contracting and Offset Agreement" shall mean that certain Second Amended and Restated Contribution, Intercompany, Contracting and Offset Agreement, dated as of the ~~Existing Credit Agreement Closing~~ Amendment No. 2 Effective Date, by and among the Loan Parties (~~other than certain Foreign Subsidiaries~~), the Collateral Agent and the Administrative Agent.

"Contribution Notice" shall mean a contribution notice issued by the Pensions Regulator under Section 38 or Section 47 of the Pensions Act 2004.

"Control" shall mean the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a person, whether through the ownership of voting securities, by contract or otherwise, and the terms **"Controlling"** and **"Controlled"** shall have meanings correlative thereto.

"Control Agreement" shall mean, with respect to a Deposit Account, Securities Account, or Commodity Account (each as defined in the UCC), (i) located in the United States, an agreement in form and substance reasonably satisfactory to the Collateral Agent establishing the Collateral Agent's ~~"Control"~~ control (within the meaning of the UCC) in such account, or (ii) located in other jurisdictions, agreements with regard to such accounts establishing and perfecting the First Priority Lien of the Collateral Agent in such accounts, and effecting the arrangements set forth in Section 9.01 (to the extent required by such Section), and otherwise in form and substance reasonably satisfactory to the Collateral Agent.

"Cost" shall mean, with respect to Inventory, the lower of (a) cost computed on a weighted average basis in accordance with GAAP or (b) market value; provided, that for purposes of the calculation of the Borrowing Base, (i) the Cost of the Inventory shall not include: the portion of the cost of Inventory equal to the profit earned by any Affiliate on the sale thereof to any Loan Party and (ii) notwithstanding anything to the contrary contained herein, the cost of the Inventory shall be computed in the same manner and consistent with the historical accounting practices of the ~~Parent Borrower~~ Designated Company and its Subsidiaries (it being understood that the Inventory Appraisal has been prepared, and each future Inventory Appraisal will be prepared, in a manner consistent with such practices).

"Covenant Recovery Event" shall mean, with respect to any Covenant Trigger Event at any time (a) no Default or Event of Default shall have been outstanding for a period of thirty (30) consecutive days then ended and (b) Excess Availability shall be at least the greater of (i) \$90,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 10% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base, for a period of thirty (30) consecutive days then ended.

"Covenant Trigger Event" shall mean as of any Business Day after the Closing Date (a) an Event of Default shall have occurred and is continuing and/or (b) Excess Availability shall as of any date (or, in the case only of Sections 5.07(c), 9.02(f), or 9.03(c), for a period of three (3) consecutive Business Days) be less than the greater of (i) \$90,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 10% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base.

"Credit Extension" shall mean, as the context may require, (i) the making of a Loan by a Lender or (ii) the issuance of any Letter of Credit (including assumption of Existing Letters of Credit), or the extension or renewal of any existing Letter of Credit, or an amendment of any existing Letter of Credit that increases the amount or changes the drawing conditions thereof, by any Issuing Bank.

"Credit Insurance Requirement" shall mean, with respect to any Account, insurance of such Account pursuant to credit insurance arrangements in form and substance, and with a creditworthy insurer, and subject to assignment or security arrangements, all of which are satisfactory to the Administrative Agent in its sole and absolute discretion.

"Credit Protective Advance" shall have the meaning assigned to such term in Section 2.01(f).

"DB Cash Pooling Arrangements" shall mean the cash pooling arrangements among the ~~Parent~~ Canadian Borrower, certain other Loan Parties and Deutsche Bank pursuant to the Transaction Banking Services Agreement among such parties and any documents ancillary thereto.

"Debtor Relief Laws" means the Bankruptcy Code and all other liquidation, conservatorship, bankruptcy, assignment for the benefit of creditors, moratorium, arrangement, rearrangement, readjustment, composition, liquidation, receivership, insolvency, reorganization, examination, or similar debtor relief or debt adjustment laws of the United States or other applicable jurisdictions from time to time in effect and affecting the rights of creditors generally.

"Deemed Borrowing Base Allocation" shall have the meaning assigned to such term in the last paragraph of Section 9.03.

"Deemed Borrowing Base Cap" shall mean (a) during the Aleris Deemed Borrowing Base Period, \$400,000,000 or (b) at all other times,

“**Default**” shall mean an Event of Default or an event, occurrence or condition which is, or upon notice, lapse of time or both would constitute, an Event of Default.

“**Default Notice**” shall have the meaning assigned to such term in Section 8.01(f).

“**Default Rate**” shall have the meaning assigned to such term in Section 2.06(f).

“**Defaulting Lender**” means, subject to Section 2.14(f), any Lender that, as determined by the Administrative Agent, (a) has failed to perform any of its funding obligations hereunder within three Business Days of the date required to be funded by it hereunder, absent a good faith dispute with respect to such obligation, (b) has notified the ~~Parent Borrower~~ Designated Company, or the Administrative Agent that it does not intend to comply with its funding obligations or has made a public statement to that effect with respect to its funding obligations hereunder or generally under other agreements in which it commits to extend credit, absent a good faith dispute with respect to such obligation, (c) has failed, within three Business Days after request by the Administrative Agent, to confirm in writing to the Administrative Agent that it will comply with its funding obligations hereunder (provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon receipt of such written confirmation by the Administrative Agent), or (d) has, or has a direct or indirect parent company that has, other than ~~via~~ pursuant to an Undisclosed Administration, (i) become the subject of any Insolvency Proceeding, (ii) had a receiver, conservator, trustee, administrator, examiner, or assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or a custodian appointed for it, (iii) taken any action in furtherance of, or indicated its consent to, approval of or acquiescence in any such proceeding or appointment, or (iv) become the subject of a Bail-In Action; provided that a Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any equity interest in that Lender or any direct or indirect parent company thereof by a Governmental Authority so long as such ownership interest does not result in or provide such Lender with immunity from the jurisdiction of courts within the United States or from the enforcement of judgments or writs of attachment on its assets or permit such Lender (or such Governmental Authority or instrumentality) to reject, repudiate, disavow or disaffirm any contracts or agreements made with such Lender. For purposes of this definition, “**Undisclosed Administration**” means in relation to a Lender or its direct or indirect parent company the appointment of an administrator, provisional liquidator, conservator, receiver, trustee, custodian or other similar official by a supervisory authority or regulator under or based on the law in the country where such Lender or such parent company is subject to home jurisdiction supervision if applicable law requires that such appointment is not to be publicly disclosed.

“**Delegate**” shall mean any delegate, agent, attorney, trustee or co-trustee appointed by the Collateral Agent or any Receiver.

“**Designated Company**” shall mean the Canadian Borrower or, on and after the Designated Holdco Effective Date, Designated Holdco.

“**Designated Holdco**” shall mean, on and after the Designated Holdco Effective Date, U.K. Holdco.

“**Designated Holdco Effective Date**” shall mean the date that (a) the actions described in clause (b) of the definition of Permitted Reorganization Actions are satisfied, and (b) the terms and conditions contained in the definitions of Permitted Reorganization and Permitted Reorganization Actions are satisfied in respect of the actions described in clause (a) above, and in respect of all Permitted Reorganization Actions commenced prior to the actions described in clause (a) above.

“**Dilution Reserve**” shall mean a reserve established by Administrative Agent in accordance with Section 2.01(d) with respect to Accounts in respect of dilution.

“**Disqualified Capital Stock**” shall mean any Equity Interest which, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable), or upon the happening of any event, (a) matures (excluding any maturity as the result of an optional redemption by the issuer thereof) or is mandatorily redeemable other than solely for Qualified Capital Stock, pursuant to a sinking fund obligation or otherwise, or is redeemable at the option of the holder thereof, in whole or in part, on or prior to 180 days after the Maturity Date, (b) is convertible into or exchangeable (unless at the sole option of the issuer thereof) for (i) debt securities or (ii) any Equity Interests referred to in (a) above, in each case at any time on or prior to 180 days after the Maturity Date, or (c) contains any mandatory repurchase obligation which may come into effect prior to 180 days after the Maturity Date; provided, however, that any Equity Interests that would not constitute Disqualified Capital Stock but for provisions thereof giving holders thereof (or the holders of any security into or for which such Equity Interests is convertible, exchangeable or exercisable) the right to require the issuer thereof to redeem such Equity Interests upon the occurrence of a change in control or an asset sale occurring prior to 180 days after the Maturity Date shall not constitute Disqualified Capital Stock if such Equity Interests provide that the issuer thereof will not redeem any such Equity Interests pursuant to such provisions prior to the Full Payment of the Obligations.

“**Distribution**” shall mean, collectively, with respect to ~~each Loan Party~~ any Person, all dividends, cash, options, warrants, rights, instruments, distributions, returns of capital or principal, income, interest, profits and other property, interests (debt or equity) or proceeds, including as a result of a split, revision, reclassification or other like change of ~~the Pledged Securities~~ Equity Interests, from time to time received, receivable or otherwise distributed to such ~~Loan Party~~ Person in respect of or in exchange for any or all of the ~~Pledged Securities or Pledged Equity Interests or~~ Intercompany Notes owned by such Person.

“**Dividend**” with respect to any person shall mean that such person has declared or paid a dividend or returned any equity capital to the holders of its Equity Interests or made any other distribution, payment or delivery of property (other than Qualified Capital Stock of such person) or cash to the holders of its Equity Interests as such, or redeemed, retired, purchased or otherwise acquired, directly or indirectly, for consideration any of its Equity Interests outstanding (or any options or warrants issued by such person with respect to its Equity Interests), or set aside any funds

for any of the foregoing purposes, or shall have permitted any of its Subsidiaries to purchase or otherwise acquire for consideration any of the Equity Interests of such person outstanding (or any options or warrants issued by such person with respect to its Equity Interests). Without limiting the foregoing, “Dividends” with respect to any person shall also include all payments made or required to be made by such person with respect to any stock appreciation rights, plans, equity incentive or achievement plans or any similar plans or setting aside of any funds for the foregoing purposes, except to the extent such payments reduce Consolidated Net Income (Fixed Charge) or Consolidated Net Income (Leverage), as applicable.

“**Dollar Denominated Loan**” shall mean each Loan denominated in Dollars at the time of the incurrence thereof.

“**Dollar Equivalent**” shall mean, as to any amount denominated in any currency other than Dollars as of any date of determination, the amount of Dollars that would be required to purchase the amount of such currency based upon the Spot Selling Rate as of such date; provided that (i) for purposes of (x) determining compliance with Sections 2.01, 2.02, 2.10(b), 2.17 and 2.18 and (y) calculating Fees pursuant to Section 2.05, the Dollar Equivalent of any amounts denominated in a currency other than Dollars shall be calculated on the date when a Loan is made or a prepayment is required to be made, and at such other times as the Administrative Agent may elect (which may be on a daily basis), using the Spot Selling Rate therefor, (ii) for purposes of determining aggregate Revolving Exposure, the Dollar Equivalent of any Revolving Exposure denominated in a currency other than Dollars shall be calculated by the Administrative Agent on a daily basis using the Spot Selling Rate in effect for such day and (iii) the Spot Selling Rate used to make determination of any Borrowing Base as reported in any currency other than Dollars in any Borrowing Base Certificate shall be determined (x) initially by the Administrative Borrower, using the Spot Selling Rate that was in effect on the day immediately prior to the date on which such Borrowing Base Certificate is delivered to the Administrative Agent pursuant to Section 9.03(a), and (y) thereafter, by the Administrative Agent on a daily basis using the Spot Selling Rate as in effect from time to time, as determined by the Administrative Agent; provided, that as to amounts determined in Dollars, the Dollar Equivalent of such amount shall be such amount in Dollars.

“**Dollars**” or “**dollars**” or “**\$**” shall mean lawful money of the United States.

“**Dubai Guarantor**” shall mean each Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in the Dubai International Financial Centre party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in the Dubai International Financial Centre that ~~is required to become~~becomes a Guarantor pursuant to the terms hereof.

“**Dubai Security Agreements**” shall mean, collectively (i) any Security Agreements ~~substantially in the form of Exhibit M-9~~, including all subparts thereto, among ~~the any~~ Dubai ~~Guarantor~~Guarantors (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Dubai Guarantor or any Person who is the holder of Equity Interests in any Dubai Guarantor in favor of the Collateral Agent and the Secured Parties and, in the case of an Assignment of Credits Agreement, also in favor of the Term Loan Collateral Agent and the secured parties under the Term Loan Credit Agreement, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, ~~in the case of each of clauses (i), (ii) and (iii)~~, that is governed by the laws of ~~Portugal~~the Dubai International Financial Centre (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Dutch Guarantor**” shall mean each Restricted Subsidiary of the Designated Company organized under the laws of the Netherlands party hereto as a Guarantor, and each other Restricted Subsidiary of the Designated Company organized under the laws of the Netherlands that becomes a Guarantor pursuant to the terms hereof.

“**Dutch Security Agreements**” shall mean, collectively (i) any Security Agreements, including all subparts thereto, among any Dutch Guarantors (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Dutch Guarantor or any Person who is the holder of Equity Interests in any Dutch Guarantor in favor of the Collateral Agent and/or the Term Loan Collateral Agent in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in each case of clauses (i), (ii) and (iii), that is governed by the laws of the Netherlands (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**EEA Financial Institution**” means (a) any credit institution or investment firm established in any EEA Member Country which is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country which is a parent of an institution described in clause (a) of this definition, or (c) any financial institution established in an EEA Member Country which is a subsidiary of an institution described in clauses (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“**EEA Member Country**” means any of the member states of the European Union, Iceland, Liechtenstein, and Norway.

“**EEA Resolution Authority**” means any public administrative authority or any person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“**Eligible Accounts**” shall mean, on any date of determination of the Borrowing Base, all of the Accounts owned by each Borrower and each Borrowing Base Guarantor, as applicable (including Purchased Receivables acquired by a Borrower or Borrowing Base Guarantor pursuant

to a Receivables Purchase Agreement except as otherwise provided below), and reflected in the most recent Borrowing Base Certificate delivered by the Administrative Borrower to the Collateral Agent and the Administrative Agent, except any Account to which any of the exclusionary criteria set forth below applies. Eligible Accounts shall not include any of the following Accounts:

(i) any Account in which the Collateral Agent, on behalf of the Secured Parties, does not have a valid, perfected First Priority Lien;

(ii) any Account that is not owned by a Borrower or a Borrowing Base Guarantor;

(iii) Accounts with respect to which the Account Debtor (other than a Governmental Authority) either (A) does not maintain its Chief Executive Office in an Applicable Eligible Jurisdiction, or (B) is not organized under the laws of an Applicable Eligible Jurisdiction or any state, territory, province or subdivision thereof; provided that Polish Accounts and Mexican Accounts included in the Total Borrowing Base (regardless of whether meeting the Credit Insurance Requirement) shall not exceed, in the aggregate, 15% of total availability in respect of Eligible Accounts;

(iv) any Account that is payable in any currency other than Dollars; provided,

that (i) Eligible Canadian Accounts may also be payable in Canadian Dollars and (ii) Eligible ~~European Accounts~~ Accounts owned by a U.K. Borrower, any other Borrowing Base Guarantor incorporated in England and Wales, a Swiss Borrower, the Belgian Borrower, or a German Borrower may also be payable in any Alternate Currency, Swiss francs, Norwegian Kroner, Swedish Kronor, or Danish Kroner; provided, however, that Polish Accounts shall be payable solely in Dollars, Euros or GBP, and Mexican Accounts shall be payable solely in Dollars;

(v) any Account that does not arise from the sale of goods or the performance of services by such Borrower or Borrowing Base Guarantor (or, with respect only to Accounts acquired by a German Borrower or Swiss Borrower pursuant to a Receivables Purchase Agreement, each Receivables Seller that sold such Account to such German Borrower or Swiss Borrower) in the ordinary course of its business;

(vi) any Account (a) upon which the right of a Borrower or Borrowing Base Guarantor, as applicable, to receive payment is contingent upon the fulfillment of any condition whatsoever unless such condition is satisfied or (b) as to which either a Borrower or Borrowing Base Guarantor, as applicable, is not able to bring suit or otherwise enforce its remedies against the Account Debtor through judicial or administrative process or (c) that represents a progress billing consisting of an invoice for goods sold or used or services rendered pursuant to a contract under which the Account Debtor's obligation to pay that invoice is subject to a Borrower's or Borrowing Base Guarantor's, as applicable, completion of further performance under such contract or is subject to the equitable lien of a surety bond issuer;

(vii) to the extent that any defense, counterclaim, setoff or dispute is asserted as to such Account, it being understood that the amount of any such defense, counterclaim, setoff or dispute shall be reflected in the applicable Borrowing Base Certificate and that the remaining balance of the Account shall be eligible;

(viii) any Account that is not a true and correct statement of bona fide indebtedness incurred in the amount of the Account for merchandise sold to or services rendered to the applicable Account Debtor;

(ix) any Account with respect to which an invoice or electronic transmission constituting a request for payment (or, if acceptable to the Administrative Agent in its sole discretion, otherwise demonstrating an obligation to make payment) has not been sent; provided

that, notwithstanding the foregoing provisions of this clause (ix), Eligible Unbilled Accounts in an aggregate amount of up to \$5,000,000 may constitute Eligible Accounts so long as the other eligibility criteria has been satisfied with respect to such Eligible Unbilled Accounts;

(x) any Account that arises from a sale to any director, officer, other employee or Affiliate of any Company;

(xi) to the extent any Company, including any Loan Party or Subsidiary, is liable for goods sold or services rendered by the applicable Account Debtor to any Company, including any Loan Party or Subsidiary, but only to the extent of the potential offset;

(xii) any Account that arises with respect to goods that are delivered on a bill-and-hold, cash-on-delivery basis or placed on consignment, guaranteed sale or other terms by reason of which the payment by the Account Debtor is or may be conditional;

(xiii) any Account that is subject to the occurrence of any of the following:

(1) such Account has not been paid within one hundred twenty (120) days following its original invoice date or is more than sixty (60) days past due according to its original terms of sale; or

(2) the Account Debtor obligated upon such Account suspends business, makes a general assignment for the benefit of creditors or fails to pay its debts generally as they come due; or

(3) a petition is filed by or against any Account Debtor obligated upon such Account under any Debtor Relief Law;

(xiv) any Account that is the obligation of an Account Debtor (other than an individual) if 50% or more of the Dollar amount of all Accounts owing by that Account Debtor are ineligible under clause (xiii) of this definition;

(xv) any Account as to which any of the representations or warranties in, or pursuant to, the Loan Documents, or any Receivables Purchase Agreement are untrue in any material respect;

(xvi) any Account to the extent such Account is evidenced by a judgment, Instrument or Chattel Paper;

(xvii) that portion of any Account in respect of which there has been, or should have been, established by any Borrower or Borrowing Base Guarantor or the Receivables Seller a contra account, whether in respect of contractual allowances with respect to such Account, audit adjustment, anticipated discounts or otherwise;

(xviii) any Account on which the Account Debtor is a Governmental Authority where Applicable Law imposes any requirement (including any requirement of notice, acceptance or acknowledgment by the Governmental Authority) to constitute a valid assignment as against such Governmental Authority, unless a Borrower or Borrowing Base Guarantor, as applicable, has assigned its rights to payment of such Account to the Administrative Agent (or in the case of ~~Aeeount~~Accounts acquired by a Borrower or Borrowing Base Guarantor pursuant to a Receivables Purchase Agreement, unless the Receivables Seller has assigned such rights to the purchaser, and the purchaser has further assigned such rights to Administrative Agent) pursuant to the Assignment of Claims Act of 1940, as amended, in the case of a U.S. federal Governmental Authority or complied with such requirement pursuant to Applicable Law in the case of any other Governmental Authority (including, in the case of Canada, the Financial Administration Act);

(xix) Accounts that are subject to (a) extended retention of title arrangements (for example, *verlängerter Eigentumsvorbehalt*, including a processing clause, *Verarbeitungsklausel*) with respect to any part of the Inventory or goods giving rise to such Account or similar arrangements under any Applicable Law to the extent of a claim that validly survives by law or contract that can effectively be enforced pursuant to such title retention arrangements or (b) that are subject to an enforceable restriction on assignment;

(xx) with respect to Accounts of any Eligible U.K. Loan Party, Belgian Borrower, German Borrower or any Swiss ~~Borrowing Base Guarantor~~Borrower, Accounts with respect to which (i) the agreement evidencing such Accounts is not governed by the laws of Belgium (in the case of the Belgian Borrower), Germany, Canada or any province thereof, England and Wales or any state in the United States ~~(or, solely with respect to Accounts purchased pursuant to any Swiss Receivables Purchase Agreement, Switzerland, France, Italy, the Netherlands, and Sweden);~~ or the laws of such other jurisdictions acceptable to the Administrative Agent in its Permitted Discretion (each, an “**Acceptable Governing Law**”) or (ii) if governed by an Acceptable Governing Law, the requirements, if any, set forth on Schedule 1.01(c) ~~hereto~~to Amendment No. 2 with respect to such Acceptable Governing Law (or the respective Accounts) are not satisfied;

(xxi) with respect to Accounts of any Eligible U.K. Loan Party, Belgian Borrower, German Borrower, or any Swiss ~~Borrowing Base Guarantor~~Borrower, Accounts where the Account Debtor either maintains its Chief Executive Office or is organized under the laws of an Applicable Eligible Jurisdiction and the requirements, if any, set forth on Schedule 1.01(c) ~~hereto~~to Amendment No. 2 with respect to such Account Debtor in such jurisdiction have not been satisfied;

(xxii) which is owing by an Account Debtor to the extent the aggregate amount of Accounts owing from such Account Debtor and its Affiliates to all Borrowers exceeds 30% (excluding the Account Debtors listed on Schedule 1.01(d) to Amendment No. 2, in each case so long as such Account Debtor’s senior unsecured debt rating is at least BBB- by S&P and Baa3 by Moody’s) of the aggregate amount of Eligible Accounts of all Borrowers; provided that the amount excluded from Eligible Accounts because they exceed the foregoing percentage shall be determined by the Administrative Agent based upon all of the otherwise Eligible Accounts prior to giving effect to any eliminations based upon the foregoing concentration limit;

(xxiii) any Account acquired by ~~the~~any German Borrower or any Swiss Borrower pursuant to ~~the German~~a Receivables Purchase Agreement that is a Disqualified Receivable (as defined therein);

(xxiv) any Account acquired ~~by~~any German Borrower or any Swiss Borrower pursuant to a Receivables Purchase Agreement which is not in full force and effect or under which any party thereto has defaulted in its obligations thereunder or disaffirmed in writing its obligations thereunder;

(xxv) any Account of ~~the~~any German Borrower or any Swiss Borrower acquired pursuant to ~~the German~~a Receivables Purchase Agreement with respect to which notice is required to have been given pursuant to ~~the Swiss~~any Security Agreement, unless such notice has been given in accordance therewith;

(xxvi) ~~any Account acquired by the Swiss Borrower pursuant to any Swiss Receivables Purchase Agreement that is a Disqualified Receivable (as defined therein);~~

~~(xxvii)~~ any Account acquired by ~~the~~ any German Borrower or any Swiss Borrower pursuant to any ~~Swiss~~ Receivables Purchase Agreement where (i) the Account Debtor has passed any voluntary winding-up resolution and (ii) a receiver, trustee, administrator, or similar officer has been appointed in relation to such Account Debtor or any of its respective assets or revenues;

~~(xxviii) any Account of the Swiss Borrower acquired pursuant to any Swiss Receivables Purchase Agreement with respect to which notice is required to have been given pursuant to the Swiss Security Agreement, unless such notice has been given in accordance therewith;~~

~~(xxix)~~ any Mexican Account (A) that is not billed and collected by a U.S. Borrower, (B) for which the Account Debtor is not ~~(w)~~ Fabricas Monterrey, S.A. De C.V., (x) Promotora Mexicana de Embotelladoras, S.A. de C.V. and/or any other can maker purchasing from Novelis Corporation pursuant to the sales agreement executed by a purchase order issued by such Account Debtor or pursuant to a contract between Novelis Corporation and Fabricas Monterrey, S.A. De C.V. or Promotora Mexicana de Embotelladoras, S.A. de C.V. and Novelis Corporation (as it may be extended, amended or modified from time to time) (in each case under this ~~clause (xxvii)~~ subject to such due diligence as the Administrative Agent may require in its sole discretion), (y) Envases Universales de Mexico, S.A.P.I. de C.V. or (z) otherwise acceptable to the Administrative Agent in its sole discretion; and (C) for which the Administrative Agent has not received such Mexican security or other documentation as it has requested in its sole discretion;

~~(xxx)~~ any Polish Account (A) that is not subject to, and billed and collected pursuant to the terms of, the Initial German Receivables Purchase Agreement, (B) for which the Account Debtor is not (y) Can-Pack S.A. or (z) otherwise acceptable to the Administrative Agent in its sole discretion; and (C) for which the Administrative Agent has not received such Polish security or other documentation as it has requested in its sole discretion;

~~(xxxi)~~ any Account of an Account Debtor for which any Accounts are subject to a Permitted Customer Account Financing ~~or, a Permitted German Alternative Financing, or Permitted Novelis Switzerland Financing;~~

~~(xxxii)~~ which the Administrative Agent determines in its Permitted Discretion may not be paid by reason of the Account Debtor's inability to pay or which the Administrative Agent otherwise determines in its Permitted Discretion is unacceptable for any reason whatsoever (in which event the Administrative Agent shall provide notice and an opportunity to discuss in accordance with the procedures set forth in the last three sentences of Section 2.01(d), mutatis mutandis);

(xxxi) on and after the date that the Swiss Merger is consummated, all Accounts that were Accounts of Novelis Switzerland immediately prior to the Swiss Merger; provided that this clause (xxxi) shall cease to apply following the date that the Administrative Agent receives the results of a field examination of the Accounts that would have been owned by Novelis Switzerland had the Swiss Merger not occurred, in form and substance reasonably acceptable to the Administrative Agent from Persons selected or retained by the Administrative Agent (which field examination shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document);

(xxxii) any Account that is subject to a current account agreement within the meaning of section 355 of the German Commercial Code;

(xxxiii) Accounts owned by a Borrower that (to the extent such Borrower is subject to the Regulation or is organized under the laws of the United Kingdom) does not have a centre of main interest or has a centre of main interest other than as situated in its jurisdiction of incorporation;

(xxxiv) Accounts of an Account Debtor that is a Sanctioned Person or that is otherwise in violation of any Anti-Corruption Laws or Anti-Money Laundering Laws;

(xxxv) Accounts of a Belgian Borrower, or Accounts of which the agreement evidencing such Account is governed by the laws of Belgium, in relation to which any bill of exchange, promissory note, check or other negotiable instrument has been issued;

(xxxvi) Accounts of a Belgian Borrower of which the Account Debtor is subject to any consumer protection provisions;

(xxxvii) Accounts of a Belgian Borrower which are subject to, and arise in connection with, a contract which is subject to public procurement (openbare aanbestedingen) laws and regulations if the relevant procurement launched prior to June 30, 2017; or

(xxxviii) Accounts which are generated in connection with the sale of assets which are not yet fully paid by the Belgian Borrower to its supplier unless such supplier does not benefit from, or has expressly waived, a retention of title (eigendomsvoorbehoud/r  serve de propri  t  ) in favor of such supplier.

Notwithstanding the foregoing, no Account will be characterized as ineligible pursuant to any of the criteria set forth in paragraphs (iii) (except to the extent otherwise provided therein), (iv), (xiii), (xiv), (xviii) through (xxv) above to the extent that the Account Debtor's obligations thereunder are insured pursuant to a credit insurance arrangement in form and substance, and with a creditworthy insurer, and subject to assignment or security arrangements, all of which is satisfactory to the Administrative Agent in its sole and absolute discretion.

"Eligible Assignee" shall mean a Person that is (a) a Lender, a U.S.-based or Irish-based Affiliate of a Lender or an Approved Fund; (b) any other financial institution approved by Administrative Agent, each Issuing Bank, and Administrative Borrower (which approval shall not be unreasonably withheld, conditioned, or delayed, and shall be deemed given by Administrative Borrower if no objection by Administrative Borrower is made within two Business Days after notice of the proposed assignment), that is organized under the laws of Ireland, the United States or any state or district thereof, has total assets in excess of \$5,000,000,000, extends asset-based lending facilities in its ordinary course of business and whose becoming an assignee would not constitute a prohibited transaction under Section 4975 of the Code or any other Applicable Law; and (c) during any Event of Default, any Person acceptable to Administrative Agent and each Issuing Bank, each in its reasonable discretion; provided that (y) "Eligible Assignee" shall not include Holdings, any Loan Party or any of their respective Affiliates or Subsidiaries or any natural person and (z) each assignee Lender shall be subject to each other applicable requirement regarding Lenders hereunder, including Sections 2.21, 5.15 and Section 11.04 (including Section 11.04 (f)).

"Eligible ~~Canadian~~Belgian Accounts" shall mean the Eligible Accounts owned by the ~~Canadian Loan Parties~~Belgian Borrower.

"Eligible ~~Canadian~~Belgian Inventory" shall mean the Eligible Inventory owned by the ~~Canadian Loan Parties~~Belgian Borrower.

"Eligible ~~European~~Canadian Accounts" shall mean the Eligible Accounts owned by ~~an Eligible European~~the Canadian Loan ~~PartyParties~~.

"Eligible ~~European Loan Party~~Canadian Inventory" shall mean the ~~U.K. Borrower, the Swiss Borrower or any other Borrowing Base Guarantor incorporated in England and Wales~~Eligible Inventory owned by the Canadian Loan Parties.

"Eligible German Accounts" shall mean, for each German Borrower that is not a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, (a) such German Borrower's Eligible Accounts and (b) solely to the extent such German Borrower is Novelis Deutschland, the Eligible Accounts ~~purchased by of each other German Borrower and each Swiss Borrower from a Receivables Seller, in each case purchased by Novelis Deutschland~~ pursuant to ~~the German~~ Receivables Purchase Agreement, ~~including Eligible Large Customer~~. For the avoidance of doubt, if a German Borrower is a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, regardless of whether such German Borrower sells any Accounts under such agreement, the Eligible Accounts of such German Borrower that are not sold pursuant to such agreement shall not be Eligible German Accounts ~~and Eligible Small Customer of such German Accounts~~Borrower.

"Eligible German Inventory" shall mean for each German Borrower, the Eligible Inventory owned by ~~the~~such German Borrower.

"Eligible Inventory" shall mean Inventory consisting of goods, including raw materials and work in process, held for sale by any U.S. Borrower, the Belgian Borrower, any Canadian Loan Party, any German Borrower, any Swiss Borrower ~~or Swiss Borrowing Base Guarantor~~, or any Eligible U.K. Loan Party, in the ordinary course, but shall exclude any Inventory to which any of the exclusionary criteria set forth below applies. Eligible Inventory shall not include any Inventory of any U.S. Borrower, the Belgian Borrower, any Canadian Loan Party, any German Borrower, any Swiss Borrower ~~or Swiss Borrowing Base Guarantor~~, or any Eligible U.K. Loan Party that:

(i) the Collateral Agent, on behalf of Secured Parties, does not have a valid, perfected First Priority Lien on (subject solely with respect to German Inventory in transit to the terms of clause (xv));

(ii) (1) is stored at a leased location, unless either (x) a Landlord Access Agreement has been delivered to the Collateral Agent, or (y) a Rent Reserve has been established with respect thereto or (2) is stored with a bailee or warehouseman (including Inventory stored or located at the Logan Location, whether Logan has possession as a warehouseman, bailee, consignee or otherwise) unless either (x) an acknowledged Bailee Letter has been delivered to the Collateral Agent (or, in the case of Inventory of ~~the~~any German Borrower or ~~any~~any Swiss Borrower ~~or Swiss Borrowing Base Guarantor~~ located on a customer's property at no cost to ~~the~~such German Borrower or such Swiss Borrower ~~or Swiss Borrowing Base Guarantor~~, the applicable customer has acknowledged the Collateral Agent's Lien on such Inventory pursuant to an agreement reasonably satisfactory to the Collateral Agent) and (in the case of a bailee that is a merchant in goods of that kind) the applicable Loan Party has filed (when applicable) appropriate UCC (or comparable) filings to perfect its interest in such Inventory or (y) a Rent Reserve has been established with respect thereto; provided that this clause (ii) shall not apply to any Inventory (A) constituting Vendor Managed Inventory in the aggregate for all such locations (together with Vendor Managed Inventory referred to in clause (iii)(A) below) of less than the greater of 10% of Eligible Inventory and \$50,000,000, or (B) located in any jurisdiction outside of the United States, Canada or Germany where such agreements are not customary;

(iii) is placed on consignment, unless a valid consignment agreement which is reasonably satisfactory to Collateral Agent is in place with respect to such Inventory and the applicable Loan Party has filed (when applicable) appropriate UCC (or comparable) filings to perfect its interest in such Inventory; provided that this clause (iii) shall not apply to any Inventory (A) constituting Vendor Managed Inventory in the aggregate for all such locations (together with Vendor Managed Inventory referred to in clause (ii)

(A) above) of less than the greater of 10% of Eligible Inventory and \$50,000,000, or (B) located in any jurisdiction outside of the United States, Canada or Germany where such agreements are not customary;

(iv) is covered by a negotiable document of title, unless such document shows Collateral Agent or the applicable Borrower as consignee, has been delivered to the Collateral Agent (or another Person satisfactory to it and acting on its behalf) with all necessary endorsements, free and clear of all Liens except those in favor of the Collateral Agent and the Lenders and landlords, carriers, bailees and warehousemen if clause (ii) above has been complied with;

(v) is to be returned to suppliers;

(vi) is obsolete (excluding items that can be recycled as scrap), unsalable, shopworn, seconds, damaged or unfit for sale;

(vii) consists of display items, samples or packing or shipping materials, manufacturing supplies, work-in-process Inventory (other than work-in-process Inventory that is in saleable form as reflected in the most recent Inventory Appraisal) or replacement parts;

(viii) is not of a type held for sale in the ordinary course of any U.S. Borrower's, Eligible U.K. Loan Party's, German Borrower's, Swiss Borrower's, Swiss Borrowing Base Guarantor's, Belgian Borrower's or Canadian Loan Party's, as applicable, business;

(ix) breaches in any material respect any of the representations or warranties pertaining to Inventory set forth in the Loan Documents;

(x) consists of Hazardous Material;

(xi) is not covered by casualty insurance maintained as required by

Section 5.04;

(xii) is subject to any licensing arrangement the effect of which would be to limit the ability of Collateral Agent, or any person selling, leasing or otherwise disposing of, the Inventory on behalf of Collateral Agent, to complete or sell, lease or otherwise dispose of such Inventory in enforcement of the Collateral Agent's Liens, without further consent or payment to the licensor or any other third party;

(xiii) is subject to an asserted claim of infringement or other violation (whether as a result of an "invitation to license" or the like) of any third party's Intellectual Property Rights, but only to the extent of such claim;

(xiv) is not at a location within the United States, Canada, Germany or England and Wales scheduled on Schedule 3.24 to Amendment No. 2 (as updated from time to time in accordance with Section 5.13), except in accordance with Section 5.13, unless in transit between locations permitted by Section 5.13 or as otherwise permitted by clause (xv); provided that Eligible Swiss Inventory shall be located in Germany except as otherwise permitted by clause (xv);

(xv) is in transit with a common carrier from vendors and suppliers, provided Inventory in transit from vendors and suppliers may be included as eligible pursuant to this clause (xv) so long as (i) the Administrative Agent shall have received evidence of satisfactory

casualty insurance naming the Collateral Agent as loss payee and otherwise covering such risks as the Administrative Agent may reasonably request, (ii) such Inventory is located in the United States, Canada or England and Wales, (iii) such Inventory is not "on-the-water"; and (iv) such Inventory is in transit for not more than ~~48~~72 hours; provided that up to the Dollar Equivalent of ~~\$18,000,000~~25,000,000 of Inventory in transit by rail for longer periods may be included as "Eligible Inventory" and (v) the common carrier is not an Affiliate of the applicable vendor or supplier; provided, further, that notwithstanding the foregoing, ~~German Borrowing Base availability and/or Swiss Borrowing Base availability, in an aggregate amount of up to the Dollar Equivalent of \$60,000,000, in respect of Inventory~~Inventory owned by a German Borrower or a Swiss Borrower that is covered by a freight forwarder or similar agreement in accordance with clause (C) below (inclusive of any Borrowing Base availability in respect of Inventory referred to in the ~~second~~last proviso to this clause (xv) below) shall be permitted ~~with respect to~~ be Eligible German Inventory ~~and/or~~ Eligible Swiss Inventory ~~in, as applicable (subject to the satisfaction of the other eligibility criteria hereunder) in an aggregate amount for all German Borrowing Bases and Swiss Borrowing Bases taken as a whole not to exceed \$60,000,000, to the extent that such Inventory is in~~ transit "on-the-water" or otherwise in transit from Rotterdam or the U.K. to Uct (or to or from another port or warehouse acceptable to the Administrative Agent in its sole discretion (each, a "Permitted Location")), so long as (A) the Administrative Agent shall have received evidence of satisfactory casualty insurance naming the Collateral Agent as loss payee and otherwise covering such risks as the Administrative Agent may reasonably request, (B) (I) in the case of inventory shipped by boat or barge, such Inventory is covered by a negotiable document of title with respect to which the requirements of clause (iv) above are fulfilled and (II) in the case of all other Inventory, such German Borrower or such Swiss Borrower, as applicable, has title thereto, (C) such Inventory is covered by a freight forwarder or similar agreement acceptable to the Administrative Agent in its sole discretion, (D) such Inventory is in transit for not more than seven (7) days, (E) the common

carrier is not an Affiliate of the applicable vendor or supplier and (F) such Inventory when at Uct (or any other destination that is a Permitted Location) would be subject to the Collateral Agent's Lien pursuant to ~~the~~ German Security Agreement (and the Administrative Agent may, in its sole discretion, take a reserve up to the total of (y) the amount owing and unpaid (including amounts not yet invoiced) to the applicable carrier and (z) all contingent shipping costs); ~~provided, further, however, that~~ Inventory owned by a German Borrower or a Swiss Borrower in an aggregate amount of up to the Dollar Equivalent of \$18,000,000 (in the aggregate) of 25,000,000 for all German Borrowing BaseBases and Swiss Borrowing Base-availabilityBases taken as a whole (which shall be included in any amount referred to in the first proviso above) shall be permitted ~~with respect to~~ be Eligible German Inventory ~~and/or~~ Eligible Swiss Inventory, as applicable (subject to the satisfaction of the other eligibility criteria hereunder), to the extent that such Inventor is in transit "on-the-water" or otherwise in transit from Rotterdam to Uct (or another port that is a Permitted Location), which Inventory is in transit for not more than forty-eight (48) hours, so long as the requirements of clauses (A), (E) and (F) above are fulfilled and such German Borrower, or such Swiss Borrower, as applicable, has title to such Inventory;

(xvi) with respect to Inventory of (i) ~~any U.K. Borrower~~ Novelis UK or any other Borrowing Base Guarantor incorporated in England and Wales, Inventory any part of which is subject to valid retention of title provisions, to the extent of such claim ~~or~~, (ii) any German Borrower or any Swiss Borrower ~~or Swiss Borrowing Base Guarantor~~, Inventory any part of which is subject to valid (x) retention of title arrangements (*Eigentumsvorbehalt*), (y) extended retention of title arrangements (*verlängerter Eigentumsvorbehalt*) or (z) broadened retention of title arrangements (*erweiterte Eigentumsvorbehalte*), in each case to the extent of such claim; ~~or (iii) any Belgian Borrower, Inventory any part of which is subject to a valid retention of title (eigendomsvoorbehoud/réserve de propriété), to the extent of such claim, unless the retention of title (eigendomsvoorbehoud/réserve de propriété) has lapsed due to the payment of the original acquisition price of such Inventory;~~

(xvii) in which any Person other than any Loan Party shall have any ownership, interest or title (other than those referred to in clause (xvi), in each case to the extent of such interest), provided that up to the Dollar Equivalent of €5,000,000 of scrap / prime ingot (other than scrap to be recycled at Norf GmbH) Inventory of ~~German Borrower~~ Novelis Deutschland located at Norf GmbH may be commingled with inventory of Norf GmbH or Hydro Aluminium Rolled Products GmbH, so long as Collateral Agent has a First Priority Lien upon such Inventory and ~~the German Borrower's~~ Novelis Deutschland's quota rights therein;

(xviii) with regard to Inventory of ~~German Borrower~~ Novelis Deutschland located at Norf GmbH, if the Loan Parties have not delivered the letter of agreement and acknowledgment (executed by Norf GmbH) in the form agreed by the Administrative Agent; ~~or~~

~~(xxix)~~ (xix) which the Administrative Agent otherwise determines in its Permitted Discretion is unacceptable for any reason whatsoever (in which event the Administrative Agent shall provide notice and an opportunity to discuss in accordance with the procedures set forth in the last three sentences of Section 2.01(d), mutatis mutandis);

(xx) on and after the date that the Swiss Merger is consummated, all Inventory that was Inventory of Novelis Switzerland immediately prior to the Swiss Merger; provided that this clause (xx) shall cease to apply following the date that the Administrative Agent receives the results of an appraisal of the Inventory of Novelis Switzerland in form and substance reasonably acceptable to the Administrative Agent from Persons selected or retained by the Administrative Agent (which appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document);

(xxi) is owned by a Borrower that (to the extent such Borrower is subject to the Regulation or is organized under the laws of the United Kingdom) does not have a centre of main interest or has a centre of main interest other than as situated in its jurisdiction of incorporation;

(xxii) is subject to a Permitted German Alternative Financing or Permitted Novelis Switzerland Financing; or

(xxiii) has been acquired from a Sanctioned Person or from a Person that is otherwise in violation of any Anti-Corruption Laws or Anti-Money Laundering Laws.

"Eligible Large Customer German Accounts" shall mean Eligible ~~German~~ Swiss Accounts for which a "Large Customer" (as defined in the ~~German~~ applicable Receivables Purchase Agreement) is the Account Debtor.

"Eligible Small Customer German Accounts" shall mean all Eligible ~~German~~ Swiss Accounts other than Eligible Large Customer German Accounts.

"Eligible Swiss Accounts" shall mean ~~Eligible German Accounts and Eligible Swiss Subsidiary Accounts,~~ for each Swiss Borrower that is not a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, (a) such Swiss Borrower's Eligible Accounts and (b) solely to the extent such Swiss Borrower is Novelis AG or the Surviving Swiss Borrower, the Eligible Swiss Purchased Accounts, and the Eligible Accounts of each German Borrower and each other Swiss Borrower, in each case purchased by such Swiss Borrower pursuant to a Receivables Purchase Agreement. The Eligible Accounts purchased by Novelis AG from a Receivables Seller pursuant to the Initial German Receivables Purchase Agreement, including Eligible Large Customer German Accounts and Eligible Small Customer German Accounts purchased pursuant thereto, shall constitute Eligible Swiss Accounts of Novelis AG. For the avoidance of doubt, if a Swiss Borrower is a party to a Receivables Purchase Agreement in the capacity of a seller thereunder, regardless of whether such Swiss Borrower sells any Accounts under such agreement, the Accounts of such Swiss Borrower that are not sold pursuant to such agreement shall not be Eligible Swiss Accounts of such Swiss Borrower.

“Eligible Swiss Inventory” shall mean, for each Swiss Borrower, the Eligible Inventory owned by ~~a~~such Swiss Borrower ~~and; provided that the Eligible Inventory of the such Swiss Borrower shall be~~ located in Germany ~~(or any other jurisdiction (excluding Switzerland) approved by the Administrative Agent in its Permitted Discretion,~~ except as otherwise permitted by clause (xv) of the definition of “Eligible Inventory”~~); provided, further, that the eligibility of such Inventory under this definition shall be subject to (i) completion of field examinations and/or inventory appraisals with regard to such Swiss Borrower satisfactory to the Administrative Agent (which initial field examination and/or initial inventory appraisal with respect to Inventory located in any new jurisdiction shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document), (ii) such other documentation as Administrative Agent may request, including legal opinions, Security Documents and certificates, and (iii) such other conditions precedent and eligibility criteria as may be established by the Administrative Agent in its sole discretion, which may include any item referred to in clauses (y) and (z) of Section 11.02(h) (as if each reference to “Accounts” therein was a reference to Inventory, mutatis mutandis).~~

“Eligible Swiss ~~Subsidiary Purchased~~ Accounts” shall mean the Eligible Accounts purchased by a Swiss Borrower from a Receivables Seller pursuant to a ~~Swiss~~ Receivables Purchase Agreement governed by the laws of Switzerland; provided that the eligibility of such accounts shall be subject to (i) execution and delivery of a ~~Swiss~~ Receivables Purchase Agreement governed by the laws of Switzerland and related documentation satisfactory, each in form and substance satisfactory to the Administrative Agent, (ii) completion of field examinations with regard to such Receivables Sellers satisfactory to the Administrative Agent (which initial field examination in respect of any Receivables Purchase Agreement shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document), (iii) such other documentation as Administrative Agent may request, including legal opinions, Security Documents and certificates, and (iv) such other conditions precedent and eligibility criteria as may be established by the Administrative

Agent in its sole discretion, which may include any item referred to in clauses (y) and (z) of Section 11.02(h).

“Eligible Unbilled Accounts” shall mean any Account of a Borrower or Borrowing Base Guarantor that arises from the sale of Inventory by such Borrower or Borrowing Base Guarantor, where such Inventory has been shipped but an invoice in respect of such sale has not been issued to the relevant Account Debtor; provided that such Account shall cease to constitute an Eligible Unbilled Account if an invoice in respect of such sale has not been issued to the relevant Account Debtor prior to the 30th day after the date of sale of such Inventory.

“Eligible U.K. Accounts” shall mean the Eligible Accounts owned by an Eligible U.K. Loan Party.

“Eligible U.K. Inventory” shall mean the Eligible Inventory owned by an Eligible U.K. Loan Party.

“Eligible U.K. Loan Party” shall mean ~~the U.K. Borrower~~Novelis UK or any other Borrowing Base Guarantor incorporated in England and Wales.

“Eligible U.S. Accounts” shall mean the Eligible Accounts owned by the U.S. Borrowers.

“Eligible U.S. Inventory” shall mean the Eligible Inventory owned by the U.S. Borrowers.

“Embargoed Person” shall have the meaning assigned to such term in Section 6.21.

“Enforcement Action” shall mean any action to enforce any Secured Obligations or Loan Documents or to exercise any rights or remedies relating to any Collateral (whether by judicial action, self-help, notification of Account Debtors, exercise of setoff or recoupment, exercise of any right to vote or act in a Loan Party’s Insolvency Proceeding, or otherwise).

“Engagement Letter” shall mean that certain engagement letter among the ~~Parent~~Canadian Borrower and Wells Fargo, dated ~~as of September 3, 2014~~January 17, 2019.

“Environment” shall mean the natural environment, including air (indoor or outdoor), surface water and groundwater (including potable water, navigable water and wetlands), the land surface or subsurface strata, natural resources, the workplace or as otherwise defined in any Environmental Law.

“Environmental Claim” shall mean any claim, notice, demand, order, action, suit, proceeding or other formal communication alleging liability for or obligation with respect to any investigation, remediation, removal, cleanup, response, corrective action, damages to natural resources, personal injury, property damage, fines, penalties or other costs resulting from, related to or arising out of (i) the presence, Release or threatened Release in or into the Environment of Hazardous Material at any location or (ii) any violation or alleged violation of any Environmental Law, and shall include any claim seeking damages, contribution, indemnification, cost recovery, compensation or injunctive relief resulting from, related to or arising out of the presence, Release or threatened Release of Hazardous Material or alleged injury or threat of injury to the Environment or to human health or safety relating to or arising out of the use of, exposure to or Releases or threatened Releases of Hazardous Material.

“Environmental Law” shall mean any and all treaties, laws, statutes, ordinances, regulations, rules, decrees, orders, judgments, consent orders, consent decrees, code or other legally binding requirements, and the common law, relating to protection of human health or the Environment, the Release or threatened Release of Hazardous Material, natural resources or natural resource damages, or occupational safety or health, and any and all Environmental Permits.

“**Environmental Permit**” shall mean any permit, license, approval, registration, notification, exemption, consent or other authorization required by or from a Governmental Authority under Environmental Law.

“**Equipment**” shall mean “equipment,” as such term is defined in the UCC, in which such Person now or hereafter has rights.

“**Equity Interest**” shall mean, with respect to any person, any and all shares, interests, participations or other equivalents, including membership interests (however designated, whether voting or nonvoting), of equity of such person, including, if such person is a partnership, partnership interests (whether general or limited) and any other interest or participation that confers on a person the right to receive a share of the profits and losses of, or distributions of property of, such partnership, whether outstanding on or issued after the Closing Date, but excluding debt securities convertible or exchangeable into such equity.

“**ERISA**” shall mean the Employee Retirement Income Security Act of 1974, as ~~the same may be~~ amended ~~from time to time~~ and any successor thereto, and the rules and regulations promulgated thereunder.

“**ERISA Affiliate**” shall mean, with respect to any person, any trade or business (whether or not incorporated) that, together with such person, is treated as a single employer under Section 414 of the Code.

“**ERISA Event**” shall mean (a) any “reportable event,” as defined in Section 4043 of ERISA or the regulations issued thereunder, with respect to a Plan (other than an event for which the thirty (30) day notice period is waived by regulation); (b) the failure to meet the minimum funding standard of Section 412 of the Code with respect to any Plan whether or not waived; (c) the failure to make by its due date a required installment under Section 430(j) of the Code with respect to any Plan or the failure to make any required contribution to a Multiemployer Plan; (d) the filing pursuant to Section 412 of the Code or Section 303(d) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan; (e) the incurrence by any Company or any of its ERISA Affiliates of any liability under Title IV of ERISA with respect to the termination of any Plan, other than for PBGC premiums due but not delinquent under Section 4007 of ERISA; (f) the receipt by any Company or any of its ERISA Affiliates from the PBGC or a plan administrator of any notice relating to the intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan; (g) the occurrence of any event or condition which could reasonably be expected to constitute grounds under Section 4042 of ERISA for the termination of, or the appointment of a trustee to administer, any Plan; (h) the incurrence by any Company or any of its ERISA Affiliates of any liability with respect to the withdrawal from any Plan subject to Section 4063 of ERISA or a cessation of operation that is treated as a withdrawal under Section 406(e) of ERISA; (i) a complete or partial withdrawal by any Company or any ERISA Affiliate from a Multiemployer Plan resulting in material Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent or in reorganization, within the meaning of Title IV of ERISA; (j) the making of any amendment to any Plan which could result in the imposition of a lien or the posting of a bond or other security; and (k) the occurrence of a nonexempt prohibited transaction (within the meaning of Section 4975 of the Code or Section 406 of ERISA) which could reasonably be expected to result in a Material Adverse Effect.

“**EU Bail-In Legislation Schedule**” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor person), as in effect from time to time.

“**EURIBOR Borrowing**” shall mean a Borrowing comprised of EURIBOR Loans.

“**EURIBOR Interest Period**” shall mean, with respect to any EURIBOR Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, two, three or six months later (or one week if commercially available to each Lender or, with regard only to a European Swingline Loan denominated in Euros, between 2 and 7 days), as Administrative Borrower may elect; provided that (a) if any EURIBOR Interest Period would end on a day other than a Business Day, such EURIBOR Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such EURIBOR Interest Period shall end on the immediately preceding Business Day, (b) any EURIBOR Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such EURIBOR Interest Period) shall end on the last Business Day of the last calendar month of such EURIBOR Interest Period, (c) Administrative Borrower shall not select a EURIBOR Interest Period that would extend beyond the Maturity Date of the applicable Loan and (d) Administrative Borrower shall not select EURIBOR Interest Periods so as to require a payment or prepayment of any EURIBOR Loan during a EURIBOR Interest Period for such Loan. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

“**EURIBOR Loan**” shall mean any Revolving Loan or European Swingline Loan bearing interest at a rate determined by reference to the Adjusted EURIBOR Rate in accordance with the provisions of ARTICLE II.

“**EURIBOR Rate**” shall mean, with respect to any EURIBOR Borrowing for any Interest Period, the interest rate per annum determined by the Banking Federation of the European Union for deposits in Euro (for delivery on the first day of such Interest Period) with a term comparable to such Interest Period, determined as of approximately 11:00 a.m., Brussels time, on the second full TARGET Day preceding the first day of such Interest Period (as set forth by Reuters or any successor thereto or any other service selected by the Administrative Agent which has been nominated by the Banking Federation of the European Union as an authorized information vendor for the purpose of displaying such rates); provided, however, that (i) if no comparable term for an Interest Period is available, the EURIBOR Rate shall be determined using the weighted average of the offered rates for the two terms most nearly corresponding to such Interest Period and (ii) if the rate referenced above is not available, “EURIBOR Rate” shall mean, with respect to each day during each Interest Period pertaining to EURIBOR Borrowings comprising part of the same Borrowing, the rate per annum equal to the rate at which the Administrative Agent (or such other bank or banks as may be designated by the Administrative Agent in consultation with European Administrative Borrower) is offered deposits in Euros at approximately 11:00 a.m., Brussels time, two TARGET Days prior to the first day of such Interest Period, for delivery on the first day of such Interest Period for the number

of days comprised therein and in an amount comparable to the amount of such EURIBOR Borrowing to be outstanding during such Interest Period (or such other amount as the Administrative Agent may reasonably determine); provided that, if the EURIBOR Rate shall be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

“euro” or “Euro” or “€” shall mean the single currency of the Participating Member States.

“Euro Denominated Loan” shall mean each Loan denominated in euros at the time of the incurrence thereof.

“Eurocurrency Borrowing” shall mean a Borrowing comprised of Eurocurrency Loans.

“Eurocurrency Interest Period” shall mean, with respect to any Eurocurrency Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, two, three or six months (or one week if commercially available to each Lender or, with regard only to a European Swingline Loan denominated in Dollars, GBP or Swiss francs, between 2 and 7 days), as Administrative Borrower may elect; provided that (a) if any Eurocurrency Interest Period would end on a day other than a Business Day, such Eurocurrency Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such Eurocurrency Interest Period shall end on the immediately preceding Business Day, (b) any Eurocurrency Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Eurocurrency Interest Period) shall end on the last Business Day of the last calendar month of such Eurocurrency Interest Period, (c) Administrative Borrower shall not select a Eurocurrency Interest Period that would extend beyond the Maturity Date of the applicable Loan and (d) Administrative Borrower shall not select Eurocurrency Interest Periods so as to require a payment or prepayment of any Eurocurrency Loan during a Eurocurrency Interest Period for such Loans. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made and thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

“Eurocurrency Loan” shall mean any Revolving Loan or European Swingline Loan bearing interest at a rate determined by reference to the Adjusted LIBOR Rate in accordance with the provisions of ARTICLE II.

~~“Eurofoil” shall mean Eurofoil Inc. (USA), a New York corporation.~~

“European Administrative Borrower” shall mean Novelis AG, or any ~~successor entity~~ European Borrower serving in that role pursuant to Section 2.03(c).

“European Borrower” shall mean the Belgian Borrower, each Swiss Borrower, ~~the each~~ German Borrower and/or each U.K. Borrower, as the context may require.

“European Borrowing Base” shall mean the lesser of (i) the sum of (A) ~~the each Swiss Borrower’s~~ Swiss Borrowing Base plus (B) the U.K. Borrowing Base plus (C) ~~the each~~ German Borrower’s German Borrowing Base plus (D) the Belgian Borrowing Base and (ii) 50% of the aggregate Revolving Commitments.

“European Cash Pooling Agreement” shall mean a Cash Management Agreement entered into among Novelis AG and certain “European Affiliates” (as identified therein) dated February 1, 2007, together with all ancillary documentation thereto.

“European Communities” shall mean the European Community created by the Treaty establishing the European Community (Treaty of Rome) of 1957.

“European LC Exposure” shall mean at any time the Dollar Equivalent of the sum of the stated amount of all outstanding European Letters of Credit at such time. The European LC Exposure of any Revolving Lender at any time shall mean its Pro Rata Percentage of the aggregate European LC Exposure at such time.

“European Letter of Credit” shall have the meaning assigned to such term in Section 2.18(a).

“European Reimbursement Obligations” shall mean each applicable Borrower’s obligations under Section 2.18 to reimburse LC Disbursements in respect of European Letters of Credit.

“European Swingline Commitment” shall mean the commitment of the European Swingline Lender to make loans pursuant to Section 2.17, as the same may be reduced from time to time pursuant to Section 2.07 or Section 2.17. The amount of the European Swingline Commitment shall initially be €70,000,000 (or, on and after the Specified Incremental Commitment Availability Date, €100,000,000), but shall in no event exceed the Adjusted Total Revolving Commitment.

“European Swingline Exposure” shall mean at any time the sum of (a) German Swingline Exposure plus (b) Swiss Swingline Exposure plus (c) U.K. Swingline Exposure. The European Swingline Exposure of any Revolving Lender at any time shall equal its Pro Rata Percentage of the aggregate European Swingline Exposure at such time.

“European Swingline Lender” shall have the meaning assigned to such term in the preamble hereto.

“**European Swingline Loan**” shall mean a German Swingline Loan, a Swiss Swingline Loan and/or a U.K. Swingline Loan, as the context may require.

“**Event of Default**” shall have the meaning assigned to such term in Section 8.01.

“**Excess Amount**” shall have the meaning assigned to such term in Section 2.10.

“**Excess Availability**” shall mean, at any time, an amount, expressed in Dollars, equal to (a) the lesser of (i) the Revolving Commitments of all of the Lenders and (ii) the Total Borrowing Base on the date of determination ~~less~~ (b) all outstanding Loans and LC Exposure; provided that in the determination of Excess Availability for any purpose hereunder (other than determination of Applicable Margin pursuant to Annex II), no more than ~~20~~50% of Excess Availability may arise from Excess German Availability.

“**Excess German Availability**” shall mean, at any time, an amount, expressed in Dollars, equal to the greater of (a) the sum of all German Borrowing ~~Base~~Bases on the date of determination minus Aggregate Total German Revolving Exposure and (b) zero.

“**Exchange Act**” shall mean the Securities Exchange Act of 1934, as amended.

“**Excluded Collateral Subsidiary**” shall mean, at any date of determination, any Restricted Subsidiary other than a Specified Aleris Subsidiary designated as such in writing by Administrative Borrower to the Administrative Agent that:

(x) (i) contributed 2.5% or less of Consolidated EBITDA (Leverage) for the period of four fiscal quarters most recently ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination, and (ii) had consolidated assets representing 2.5% or less of the Consolidated Total Assets of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries on the last day of the most recent fiscal quarter ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination;

(y) together with all other Restricted Subsidiaries constituting Excluded Collateral Subsidiaries (i) contributed 7.5% or less of Consolidated EBITDA (Leverage) for the period of four fiscal quarters most recently ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination, and (ii) had consolidated assets representing 7.5% or less of the Consolidated Total Assets of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries on the last day of the most recent fiscal quarter ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination, and

(z) is not a Loan Party on the Closing Date; provided that no Loan Party shall constitute an Excluded Collateral Subsidiary except to the extent such Loan Party issues Equity Interests to Persons other than a Company pursuant to Section 6.06(l) and immediately prior to such issuance such Person would have otherwise qualified as an Excluded Collateral Subsidiary under clause (x) and (y) above.

The Excluded Collateral Subsidiaries as of the ~~Closing~~Amendment No. 2 Effective Date are listed on Schedule 1.01(e) to Amendment No. 2.

“**Excluded Contract**” shall have the meaning assigned to such term in the definition of “Excluded Property”.

“**Excluded Equity Interests**” shall mean (a) any Equity Interests of any Person with respect to which the cost or other consequences (including any adverse tax consequences) of pledging such Equity Interests shall be excessive in view of the benefits to be obtained by the Lenders therefrom as reasonably determined by the Administrative Agent and the Administrative Borrower, (b) (i) any Equity Interests to the extent the pledge thereof would be prohibited by any applicable law or contractual obligation (only to the extent such prohibition is applicable and not rendered ineffective by any applicable law and, in the case of any such contractual obligation, permitted under Section 6.19 hereof) and (eii) the Equity Interests of any Unrestricted Subsidiary; and (c) the Chinese Subsidiary Equity Interests, unless the Required Lenders reasonably determine that the value of the Chinese Subsidiary Equity Interests, if pledged, would be material to the Collateral, taken as a whole, and request the pledge of such Chinese Subsidiary Equity Interests (in which case such Chinese Subsidiary Equity Interests shall cease to be Excluded Equity Interests sixty days (or such later date agreed by the Administrative Agent in its sole discretion) following receipt of such request); provided that the Equity Interests issued by a Specified Aleris Subsidiary shall not constitute Excluded Equity Interests.

“**Excluded Factoring Bank Accounts**” shall have the meaning assigned to such term in the definition of “Excluded Property”.

“**Excluded Property**” shall mean (a) any Excluded Equity Interests, (b) any property, including the rights under any contract or agreement (an “**Excluded Contract**”) to the extent that the grant of a Lien thereon (i) is prohibited by applicable law or contractual obligation so long as such contractual obligations are not entered into in contemplation of such prohibition, (ii) requires a consent not obtained of any governmental authority pursuant to such applicable law or any third party pursuant to any contract between the ~~Parent Borrower~~Designated Company or any Subsidiary and such third party or (iii) would trigger a termination event pursuant to any “change of control” or similar provision, in each case pursuant to this clause (a), except to the extent such anti-assignment or negative pledge is not enforceable under the UCC or other applicable requirements of Applicable Law, or such contractual obligation is prohibited under Section 6.19 hereof, (b) United States intent to use trademark applications to the extent that, and solely during the period in which, the grant of a Lien thereon would impair the validity or enforceability of such intent to use trademark applications under applicable United States federal law, (c) local petty cash deposit accounts maintained by the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries in proximity to their operations, (d) payroll accounts maintained by the ~~Parent Borrower~~Designated Company and its Subsidiaries, (e) Property that is, or is to become, subject to a Lien securing a Purchase Money Obligation or Capital Lease Obligation permitted to be incurred pursuant to this Agreement, if the contract or other agreement in which such Lien is granted

(or the documentation providing for such Purchase Money Obligation or Capital Lease Obligation) validly prohibits the creation of any other Lien on such Property and such prohibition is permitted under Section 6.19 hereof, (f)(x) any leasehold real property, (y) any fee-owned real property having an individual fair market value not exceeding \$10,000,000 and (z) any fee-owned real property located in the United States, (g) any Letter-of-Credit Rights that are not Supporting Obligations (each as defined in the UCC), ~~and~~ (h) any other property with respect to which the cost or other consequences (including any materially adverse tax consequences) of pledging such property shall be excessive in view of the benefits to be obtained by the Lenders therefrom as reasonably determined by the Administrative Agent, (i) Equipment located at owned or leased locations in Brazil where the aggregate fair market value of the Equipment located at such location and not subject to a Lien in favor of the Collateral Agent does not exceed \$5,000,000, (j) if the aggregate fair market value of Equipment located at the plant operated by Novelis do Brasil Ltda., at Av. Buriti, 1.087, CEP 12441-270, Feital – Pindamonhangaba-SP, Brazil (the “Specified Brazilian Expansion”) that is not pledged in favor of the Collateral Agent to secure the Secured Obligations is less than \$100,000,000, then such Equipment shall not be required to be so pledged until the earlier of (i) the date that is two years after the commencement of the Specified Brazilian Expansion, and (ii) the date that the Companies complete or otherwise discontinue work on the expansion of such plant, and (k) Factoring Bank Accounts in respect of any Permitted Customer Account Financing or other Permitted Factoring Facility, solely to the extent that (i) such financing or facility remains in full force and effect or, if factored receivables continue to be settled using such account, until the earlier of the date that the last such factored receivable has settled and the date that such account is closed, (ii) such Factoring Bank Accounts constitute Factoring Assets solely in respect of such Permitted Customer Account Financing or such other Permitted Factoring Facility, (iii) such Factoring Bank Accounts are segregated (and the deposits therein not commingled with Collateral) in a manner reasonably satisfactory to the Administrative Agent (with written confirmation of such determination provided to the Administrative Agent), and (iv) Holdings or the Designated Company shall have executed and delivered a certificate to the Administrative Agent, no later than two Business Days after entering into a Permitted Customer Account Financing or other Permitted Factoring Facility, attaching a description of such Factoring Bank Accounts subject to such financing or facility, and certifying that the terms of such financing or facility comply with the requirements set forth in this clause (k) (Factoring Bank Accounts that continue to satisfy the requirements of subclauses (i) through (iv) of this clause (k), the “Excluded Factoring Bank Accounts”); provided that the Equity Interests issued by a Specified Aleris Subsidiary shall not constitute Excluded Property.

“**Excluded Subsidiaries**” shall mean Restricted Subsidiaries of Holdings that are not organized in a Principal Jurisdiction.

“**Excluded Swap Obligation**” means, with respect to any Guarantor, any Swap Obligation if, and to the extent that, all or a portion of the Guarantee or Foreign Guarantee of such Guarantor of, or the grant by such Guarantor of a security interest to secure, such Swap Obligation (or any Guarantee or Foreign Guarantee thereof) is or becomes illegal under the Commodity Exchange Act or any rule, regulation or order of the Commodity Futures Trading Commission (or the application or official interpretation of any thereof) by virtue of such Guarantor’s failure for any reason to constitute an “eligible contract participant” as defined in the Commodity Exchange Act and the regulations thereunder at the time the Guarantee or Foreign

Guarantee of such Guarantor or the grant of such security interest becomes effective with respect to such Swap Obligation. If a Swap Obligation arises under a master agreement governing more than one swap, such exclusion shall apply only to the portion of such Swap Obligation that is attributable to swaps for which such Guarantee or Foreign Guarantee or security interest is or becomes illegal.

“**Excluded Taxes**” shall mean, with respect to the Agents, any Lender, any Issuing Bank or any other recipient of any payment to be made by or on account of any obligation of any Borrower or Guarantor hereunder, (a) taxes imposed on or measured by its overall net income (however denominated), franchise taxes imposed on it (in lieu of net income taxes) and branch profits taxes imposed on it, (i) by a jurisdiction (or any political subdivision thereof) as a result of the recipient being organized or having its principal office or, in the case of any Lender, its applicable lending office in such jurisdiction or (ii) that are Other Connection Taxes, (b) any U.S. federal withholding tax that (i) is imposed on amounts payable to such Lender at the time such Lender becomes a party hereto (or designates a new lending office), except (x) to the extent that such Lender (or its assignor, if any) was entitled, at the time of designation of a new lending office (or assignment), to receive additional amounts from any Borrower with respect to such withholding tax pursuant to Section 2.15(a) or (y) if such Lender designates a new lending office or is an assignee pursuant to a request by any Borrower under Section 2.16; provided that this subclause (b)(i) shall not apply to any Tax imposed on a Lender in connection with an interest or participation in any Loan or other obligation that such Lender was required to acquire pursuant to Section 2.14(d), or (ii) is attributable to such Lender’s failure to comply with Section 2.15(e), (c) any Taxes imposed under FATCA and (d) for greater certainty, taxes imposed on amounts deemed to be interest pursuant to section 214(7) of the Income Tax Act (Canada).

“**Executive Order**” shall have the meaning assigned to such term in Section 3.22.

“**Existing Aleris Credit Agreement**” shall mean the credit agreement, dated as of June 15, 2015, among Aleris and certain of its Affiliates, as borrowers and guarantors, JPMorgan Chase Bank, N.A., as administrative agent, and the other financial institutions party thereto, as the same may be amended, amended and restated, replaced or refinanced prior to the Aleris Acquisition Closing Date in a manner that does not violate this Agreement or the terms of the Aleris Acquisition Agreement.

“**Existing Aleris Letter of Credit**” shall mean the letters of credit outstanding on the Aleris Acquisition Closing Date and designated as “Existing Aleris Letters of Credit” pursuant to Section 2.18(f)(ii), to the extent such letters of credit were originally issued for the account of Aleris or any Subsidiary of the Designated Company acquired pursuant to the Aleris Acquisition under the Existing Aleris Credit Agreement.

“Existing Credit Agreement” shall mean that certain Amended and Restated Credit Agreement, dated as of May 13, 2013, among Novelis Inc., as parent borrower, Novelis Corporation, as U.S. borrower, the other U.S. borrowers party thereto, Novelis UK Ltd, as U.K. borrower, Novelis AG, as Swiss borrower, Novelis Deutschland GmbH, as German borrower, AV Metals Inc., the other Loan Parties party thereto, the lenders party thereto, Wells Fargo Bank, National Association, as administrative agent and as collateral agent, and the other parties thereto, as amended, restated, supplemented or modified prior to the Closing Date.

“Existing Credit Agreement Closing Date” shall mean the “Closing Date” (as defined in the Existing Credit Agreement).

“Existing Issuing Banks” shall mean Bank of America, N.A. and Deutsche Bank AG New York Branch, and, solely with respect to Letters of Credit outstanding on the Amendment No. 2 Effective Date, HSBC Bank USA, N.A., each as an Issuing Bank, and the successor of any of the foregoing in such capacity pursuant to Section 2.18(d) or (e), each in its capacity as an issuer of U.S. Letters of Credit and European Letters of Credit issued by it.

“Existing Letter of Credit” shall mean the letters of credit referred to on Schedule 2.18(a), in each case that is issued by a Lender or an Affiliate of a Lender that is eligible to be an Issuing Bank.

“Existing Lien” shall have the meaning assigned to such term in Section 6.02(c).

“Extended Commitment” shall have the meaning assigned to such term in Section 11.02(g).

“Extraordinary Expenses” shall mean all costs, expenses or advances that any Agent or Receiver (or, to the extent set forth in Section 11.03(a), the Lenders) may incur during a Default or Event of Default, or during the pendency of an Insolvency Proceeding of a Loan Party, including those relating to (a) any audit, inspection, repossession, storage, repair, appraisal, insurance, manufacture, preparation or advertising for sale, sale, collection, or other preservation of or realization upon any Collateral; (b) any action, arbitration or other proceeding (whether instituted by or against any Agent, any Lender, any Receiver, any Loan Party, any representative of creditors of any Loan Party or any other Person) in any way relating to any Collateral (including the validity, perfection, priority or avoidability of the Liens on the Collateral for the benefit of the Secured Parties), Loan Documents, Letters of Credit or Secured Obligations, including any lender liability or other Claims; (c) the exercise, protection or enforcement of any rights or remedies of any Agent or Receiver in, or the monitoring of, any Insolvency Proceeding; (d) settlement or satisfaction of any taxes, charges or Liens with respect to any Collateral; (e) any Enforcement Action; (f) negotiation and documentation of any modification, waiver, workout, restructuring or forbearance with respect to any Loan Documents or Secured Obligations; and (g) Protective Advances. Such costs, expenses and advances include transfer fees, Other Taxes, storage fees, insurance costs, permit fees, utility reservation and standby fees, legal fees, appraisal fees, brokers’ fees and commissions, auctioneers’ fees and commissions, accountants’ fees, environmental study fees, wages and salaries paid to employees of any Loan Party or independent contractors in liquidating any Collateral, and travel expenses.

“Factoring Assets” shall mean all existing or hereafter acquired or arising (i) Receivables that are sold, transferred or disposed of pursuant to a Permitted Factoring Facility permitted under Section 6.06(e), (ii) the Related Security with respect to the Receivables referred to in clause (i) above, (iii) the collections and proceeds of the Receivables and Related Security referred to in clauses (i) and (ii) above, (iv) all lockboxes, lockbox accounts, collection accounts or other deposit accounts ~~into which~~ substantially all of the deposits of which consist of such collections are deposited and proceeds referred to in clause (iii) above (and in any event excluding any lockboxes, lockbox accounts, collection accounts or deposit accounts that any Company organized under the laws of any Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing and any Permitted Novelis Switzerland Financing) has an interest in) and which have been specifically identified and consented to by the Administrative Agent (the lockboxes, lockbox accounts, collection accounts or other deposit accounts described in this clause (iv)). “Factoring Bank Accounts”, (v) all other rights and payments which relate solely to ~~such the~~ Receivables referred to in clause (i) above and (vi) all cash reserves comprising credit enhancements for such Permitted Factoring Facility.

“Factoring Bank Accounts” shall have the meaning assigned to such term in clause (iv) of the definition of Factoring Assets.

“FASB ASC” shall mean the Accounting Standards Codification of the Financial Accounting Standards Board.

“FATCA” means Sections 1471 through 1474 of the Code ~~in effect~~, as of the Closing Date date of this Agreement (or any amended or successor ~~provisions version~~ that are ~~is~~ substantively comparable); and not materially more onerous to comply with, and (a) any current or future regulations or official interpretations thereof, ~~(including any revenue ruling, revenue procedure, notice or similar guidance issued by the United States Internal Revenue Service thereunder as a precondition to relief or exemption from taxes under such provisions);~~ b) any agreements entered into pursuant to Section 1471(b)(1) of the Code, and ~~(c)~~ any intergovernmental agreements (and any official guidance implementing agreement entered into by the United States (or any fiscal or regulatory legislation, rules, or practices adopted pursuant to any such intergovernmental ~~agreements~~ agreement entered into in connection therewith).

“Federal Funds Rate” shall mean ~~(a), for any period, a fluctuating interest rate per annum equal to, for each day during such period, the weighted average of interest the rates on overnight federal Federal funds transactions with members of the Federal Reserve System on the applicable Business Day (or on the preceding Business Day, if the applicable day is not a Business Day), as published on the next succeeding Business Day by the Federal Reserve Bank of New York on the next Business Day; or (b) if no, or, if such rate is not so published on the next for any day which is a Business Day, the average rate (rounded up, if necessary, to the nearest 1/8 of 1%) charged to Wells Fargo on the applicable of the quotations for such day on such transactions; as determined by Agent; provided that, if the Federal Funds Rate shall be less than zero, such rate~~

received by the Administrative Agent from three Federal funds brokers of recognized standing selected by it (and, if any such rate is below zero, then the rate determined pursuant to this definition shall be deemed to be zero for purposes of this Agreement).

“**Fee Letter**” shall mean that certain fee letter among Wells Fargo and the Loan Parties party thereto, dated as of the Existing Credit Agreement Closing Date.

“**Fees**” shall mean the fees payable hereunder, under the Engagement Letter, or under the Fee Letter.

“**Financial Officer**” of any person shall mean the chief financial officer, principal accounting officer, treasurer or controller of such person.

“**Financial Support Direction**” shall mean a financial support direction issued by the Pensions Regulator under Section 43 of the Pensions Act 2004.

“**FIRREA**” shall mean the Federal Institutions Reform, Recovery and Enforcement Act of 1989, as amended.

“**First Priority**” shall mean, with respect to any Lien purported to be created in any Collateral pursuant to any Security Document, that such Lien is the most senior Lien to which such Collateral is subject, other than Permitted Liens of the type described in Section 6.02(a), (b), (c), (d), (f), (g), (h), (i), (j), (k)(i)-(v) (to the extent provided in the Intercreditor Agreement), (n), (o), (q), (r), (s), (t), (y) and, (z), (aa), (bb), (dd) or (ee) which have priority over the Liens granted pursuant to the Security Documents (and in each case, subject to the proviso to Section 6.02).

“**Foreign Assets Control Regulations**” shall have the meaning assigned to such term in Section 3.22.

“**Foreign Guarantee**” shall have the meaning assigned to such term in Section 7.01.

“**Foreign Lender**” shall mean any Lender that is not, for United States federal income tax purposes, (i) an individual who is a citizen or resident of the United States, (ii) a corporation, partnership or other entity treated as a corporation or partnership created or organized in or under the laws of the United States, or any political subdivision thereof, (iii) an estate whose income is subject to U.S. federal income taxation regardless of its source or (iv) a trust if a court within the United States is able to exercise primary supervision over the administration of such trust and one or more United States persons have the authority to control all substantial decisions of such trust or a trust that properly elected to be treated as a United States person.

“**Foreign Plan**” shall mean any pension or other employee benefit or retirement plan, program, policy, arrangement or agreement maintained or contributed to by any Company with respect to employees employed outside the United States (other than a Canadian Pension Plan).

“**Foreign Subsidiary**” shall mean a Subsidiary that is organized under the laws of a jurisdiction other than the United States or any state thereof or the District of Columbia.

~~“**Forward Share Sale Agreement**” shall mean that certain Forward Share Sale Agreement, dated as of December 17, 2010, between Novelis Inc. and Novelis Acquisitions LLC pursuant to which Novelis Inc. has agreed to sell shares of 9.50% preferred stock of Novelis Corporation owned by it to Novelis Acquisitions LLC.~~

“**French Collateral Agent**” shall mean Wells Fargo Bank, National Association, in its capacity as security agent (*agent des sûretés*), under the French Security Agreements and any of its successors or assigns. ~~For the avoidance of doubt, provided that (A) with respect to any French Security Agreements entered into prior to the Amendment No. 2 Effective Date and any security interests granted under any such French Security Agreements, the French Collateral Agent is hereby appointed by the Lenders to act on their behalf as security agent (*agent des sûretés*) to constitute (*constituer*), register (~~insérer~~*inscrire*), manage (*gérer*) and enforce (*réaliser*) the security interests contemplated by the such French Security Agreements in order to fully secure and guarantee their respective rights in each amount payable by each French Guarantor or each Person who is the holder of Equity Interests in any French Guarantor to each of the Secured Parties under each of the Loan Documents, and in that capacity to accomplish all actions and formalities eventually necessary under article 2328-1 of the French *code civil*. Pursuant to article 1161 of the French *code civil*, the Lenders hereby expressly authorize the French Collateral Agent to act on the behalf and for the account of the Lenders and in its own name and for its own account as creditor under the Parallel Debt provision set forth in Section 11.24, in connection with the performance of the Loan Documents. (as enacted as of December 17, 2010), and (B) with respect to any French Security Agreements entered into on or after the~~ Amendment No. 2 Effective Date and any security interests granted under any such French Security Agreements, the French Collateral Agent is appointed by the Lenders as security agent (*agent des sûretés*) for the purposes, *inter alia*, of taking, receiving, administering and enforcing the security interests contemplated by such French Security Agreements in the French Collateral Agent’s own name and for the benefit of the Secured Parties, as creditors of the Secured Obligations, in accordance with articles 2488-6 to 2488-12 of the French *code civil*; it being provided that (X) with respect to the appointment of the French Collateral Agent as security agent (*agent des sûretés*) in each of paragraphs (A) and (B), each of the provisions of Article X hereof shall apply with respect to such appointment and is repeated *mutatis mutandis* in each of these paragraphs, and (Y) with respect to the appointment of the French Collateral Agent as security agent (*agent des sûretés*) in paragraph (B) only, such appointment as security agent (*agent des sûretés*) shall be governed by the provisions of articles 2488-6 to 2488-12 of the French *code civil*, and, as such, each of the parties hereto acknowledge and agree as follows:

(a) the security agent (*agent des sûretés*) shall, in such capacity, be the direct title holder (*titulaire*) of any security interests contemplated by the French Security Agreements and the direct beneficiary of such security interests in accordance with article 2488-6 of the French *code civil*;

(b) the rights and assets acquired by the security agent (*agent des sûretés*) in carrying out its functions in such capacity will constitute separate property (*patrimoine affecté*) allocated thereto, distinct from its own property (*patrimoine propre*) in accordance with article 2488-6 of the French *code civil*;

(c) for the purposes of article 2488-7 of the French *code civil*, the capacity (*qualité*) in which the security agent (*agent des sûretés*) has been so appointed, the purpose of such appointment (*l'objet de sa mission*) and the scope of its power (*étendue de ses pouvoirs*) in connection with such appointment shall be as set forth in this paragraph (B) and the provisions of Sections 10.01 and 10.07, and the term of such appointment (*durée de sa mission*) shall extend (subject to the provisions of Section 10.07) until full payment or satisfaction of the Secured Obligations under the French Security Agreements; and

(d) the security agent (*agent des sûretés*) shall be entitled, without being required to prove the existence of a special mandate, to exercise any action necessary in order to defend the interests of the creditors of the Secured Obligations in connection with the security interests contemplated by the French Security Agreements, including filing claims in insolvency proceedings.

“**French Guarantor**” shall mean each Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in France party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in France that ~~is required to become~~becomes a Guarantor pursuant to the terms hereof.

“**French Security Agreements**” shall mean, collectively (i) any Security Agreements ~~substantially in the form of Exhibit M-10~~, including all subparts thereto, among ~~the any~~ French ~~Guarantor~~Guarantors (and such other Persons as may be party thereto) and the French Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any French Guarantor or any Person who is the holder of Equity Interests in any French Guarantor in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and (iii)~~, any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of France (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Fronting Fee**” shall have the meaning assigned to such term in Section 2.05(c).

“**Full Payment**” shall mean, with respect to any Secured Obligations, (a) the full and indefeasible cash payment thereof, including any interest, fees and other charges accruing during an Insolvency Proceeding (whether or not allowed in the proceeding); (b) if such Secured Obligations are LC Obligations or inchoate or contingent in nature, cash collateralization thereof (or delivery of a standby letter of credit acceptable to Administrative Agent in its discretion, in the amount of required cash collateral) in an amount equal to (x) 105% of all LC Exposure and (y) with respect to any inchoate, contingent or other Secured Obligations (including Secured Bank Product Obligations), Administrative Agent’s good faith estimate of the amount due or to become due, including all fees and other amounts relating to such Secured Obligations; and (c) a release of any Claims of the Loan Parties against each Agent, Lenders and each Issuing Bank arising on or before the payment date. No Loans shall be deemed to have been paid in full until all Commitments related to such Loans have expired or been terminated.

“**Fund**” shall mean any Person (other than a natural Person) that is (or will be) engaged in making, purchasing, holding or otherwise investing in commercial loans and similar extensions of credit in the ordinary course of its activities.

“**Funded Debt**” shall mean, as to any person, all Indebtedness of such person that matures more than one year from the date of its creation or matures within one year from such date but is renewable or extendible, at the option of such person, to a date more than one year

from such date or arises under a revolving credit or similar agreement that obligates the lender or lenders to extend credit during a period of more than one year from such date, including all current maturities and current sinking fund payments in respect of such Indebtedness whether or not required to be paid within one year from the date of its creation and, in the case of the ~~Parent Borrower~~Designated Company and its Subsidiaries, Indebtedness in respect of the Loans and the Term Loans.

“**Funding Conditions**” shall have the meaning assigned to such term in Section 2.01(a).

“**GAAP**” shall mean generally accepted accounting principles in the United States applied on a consistent basis; provided that if the ~~Parent Borrower~~Designated Company converts its financial reporting from generally accepted accounting principles in the United States to IFRS as permitted under Section 1.04, “**GAAP**” shall mean (subject to the provisions of Section 1.04 hereof) IFRS applied on a consistent basis.

“**GBP**” or “**£**” shall mean lawful money of the United Kingdom.

“**GBP Denominated Loan**” shall mean each Loan denominated in GBP at the time of the incurrence thereof.

~~“German Borrower” shall have the meaning assigned to such term in the preamble hereto.~~

“German Borrowers” shall mean, except as provided in the definition of Permitted German Alternative Financing, (a) Novelis Deutschland and (b) on and after the Aleris Acquisition Closing Date following the consummation of the Aleris Acquisition, (i) to the extent such Person joins this Agreement as a Borrower on the Aleris Acquisition Closing Date, Aleris Rolled Products and Aleris Casthouse, and (ii) each Specified Aleris German Subsidiary that becomes a German Borrower pursuant to Section 2.20 (the German Borrowers under this clause (b), “Additional German Borrowers”).

“German Borrowing Base” shall mean, for each German Borrower at any time, an amount equal to the sum of the Dollar Equivalent of, without duplication:

(i) the book value of such German Borrower’s Eligible German Accounts multiplied by the advance rate of 85%, plus

(~~ii~~) the lesser of (~~x~~) the advance rate of 75% of the Cost of such German Borrower’s Eligible German Inventory, or (~~iii~~) the advance rate of 80% of the Net Recovery Cost Percentage multiplied by the Cost of such German Borrower’s Eligible German Inventory, minus

(ii) any Reserves established from time to time by the Administrative Agent with respect to ~~the~~ such German Borrower’s German Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, however, that during the Aleris Deemed Borrowing Base Period, solely with respect to each Additional German Borrower that has satisfied the Aleris Deemed Borrowing Base Collateral Conditions, such Additional German Borrower’s German Borrowing Base shall be equal to the lesser of:

(a) such German Borrower’s Deemed Borrowing Base Allocation in effect at such time; and

(b) the sum of the Dollar Equivalent of, without duplication:

(i) the sum of (x) 50% of the aggregate gross Accounts of such Additional German Borrower, and (y) 25% of the net book value of all Eligible German Inventory of such Additional German Borrower; minus

(ii) any Reserves established from time to time by the Administrative Agent with respect to such German Borrower’s German Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, further, that if the Administrative Agent has not received Acceptable Collateral Diligence in respect of any Additional German Borrower on or prior to the date that is 90 days after the Aleris Acquisition Closing Date, then following such date until the date that the Administrative Agent receives Acceptable Collateral Diligence in respect of such Additional German Borrower, such Additional German Borrower’s German Borrowing Base shall be deemed to be zero;

provided, however, that in no event shall the sum of (a) the aggregate amount of the German Borrowing BaseBases for all German Borrowers available in respect of Eligible German Inventory, plus (b) the ~~portion~~ aggregate amount of the Swiss Borrowing BaseBases for all Swiss Borrowers available in respect of Eligible Swiss Inventory, exceed the greater of (A) \$175,000,000 (or, on and after the Aleris Acquisition Closing Date, \$225,000,000) and (B) 20% of the Total Gross Borrowing Base.

~~The~~Each German Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that ~~the~~ such German Borrowing Base is calculated in accordance with the terms of this Agreement. Each German Borrower’s Deemed Borrowing Base Allocation at any time shall be determined by reference to the most recent Borrowing Base Certificate or other certificate theretofore delivered to the Administrative Agent, or in any certificate delivered to the Administrative Agent pursuant to the last paragraph of Section 9.03, with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the German Borrowing Base of each German Borrower is calculated in accordance with the terms of this Agreement. For the avoidance of doubt, so long as the Initial German Receivables Purchase Agreement remains in effect, the Eligible German Accounts of Novelis Deutschland shall be zero.

“German Guarantor” shall mean each Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Germany party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Germany that ~~is required to become~~ becomes a Guarantor pursuant to the terms hereof.

“German Loan Party” shall mean ~~the~~ a German Borrower or a German Guarantor.

~~“German Receivables Purchase Agreement” shall have the meaning assigned to such term in the definition of “Receivables Purchase Agreement”.~~

“German Revolving Exposure (Individual)” shall mean, for each German Borrower individually, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding German Revolving Loans of such Lender made to such German Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such Lender’s European LC Exposure applicable to

European Letters of Credit issued for the account of such German Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European Swingline Exposure applicable to each European Swingline Loan made to such German Borrower.

“**German Revolving Exposure (Total)**” shall mean, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding German Revolving Loans of such Lender made to all German Borrowers taken as a whole, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European LC Exposure applicable to European Letters of Credit issued for the account of any German Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European Swingline Exposure applicable to each European Swingline Loan made to a German Borrower.

“**German Revolving Loan**” shall have the meaning assigned to such term in

Section 2.01(a).

“**German Security Agreement**” shall mean, collectively (i) any Security Agreement ~~substantially in the form of Exhibit M-5~~, including all subparts thereto, among the German Loan Parties (and such other Persons as may be party thereto) and the Collateral Agent and/or the Term Loan Collateral Agent in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, among others, for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any German Loan Party or any Person who is the holder of Equity Interests in any German Loan Party in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and (iii)~~ any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Germany (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

~~“**German Seller**” shall mean German Borrower (including in its roles as seller and collection agent under the German Receivables Purchase Agreement);~~

“**German Swingline Exposure**” shall mean at any time the aggregate principal amount at such time of all outstanding German Swingline Loans. The German Swingline Exposure of any Revolving Lender at any time shall equal its Pro Rata Percentage of the aggregate German Swingline Exposure at such time.

“**German Swingline Loan**” shall mean any loan made by the European Swingline Lender to ~~the~~ German Borrower pursuant to Section 2.17. For the avoidance of doubt, German Swingline Loans shall include Overadvances made as German Swingline Loans.

“**Governmental Authority**” shall mean the government of the United States or any other nation, or of any political subdivision thereof, whether state, provincial or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

“**Governmental Real Property Disclosure Requirements**” shall mean any requirement of Applicable Law of any Governmental Authority requiring notification of the buyer, lessee, mortgagee, assignee or other transferee of any Real Property, facility, establishment or business, or notification, registration or filing to or with any Governmental Authority, in connection with the sale, lease, mortgage, assignment or other transfer (including any transfer of control) of any Real Property, facility, establishment or business, of the actual or threatened presence or Release in or into the Environment, or the use, disposal or handling of Hazardous Material on, at, under or near the Real Property, facility, establishment or business to be sold, leased, mortgaged, assigned or transferred.

“**Guarantee Payment**” shall have the meaning assigned to such term in Section 7.12(b).

“**Guaranteed Obligations**” shall have the meaning assigned to such term in Section 7.01.

“**Guarantees**” shall mean the guarantees issued pursuant to ARTICLE VII by the Guarantors.

“**Guarantors**” shall mean each Borrower, Holdings and the Subsidiary Guarantors (including, but not limited to, each U.S. Borrower, the ~~Parent~~ Canadian Borrower, ~~the~~ Designated Holdco, each U.K. Borrower, ~~the~~ Swiss Borrower, Holdings and each other Canadian Guarantor, each Swiss Borrower and each Swiss Guarantor, each U.K. Guarantor, ~~the~~ each German Borrower and each German Guarantor, each Irish Guarantor, ~~the~~ each Brazilian Guarantor, the ~~Madeira~~ Belgian Borrower and each Belgian Guarantor, ~~the~~ each French Guarantor, ~~the~~ each Dutch Guarantor, each Dubai Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company that becomes or is required to become a Guarantor hereunder, and including in any case each Borrowing Base Guarantor).

“**Hazardous Materials**” shall mean the following: hazardous substances; hazardous wastes; polychlorinated biphenyls (“PCBs”) or any substance or compound containing PCBs; asbestos or any asbestos-containing materials in any form or condition; radon or any other radioactive materials including any source, special nuclear or by-product material; petroleum, crude oil or any fraction thereof; and any other pollutant or contaminant or chemicals, wastes, materials, compounds, constituents or substances, subject to regulation under or which can give rise to liability (including, but not limited to, due to their ignitability, corrosivity, reactivity or toxicity) under any Environmental Laws.

“**Hedging Agreement**” shall mean any swap, cap, collar, forward purchase or similar agreements or arrangements dealing with interest rates, currency exchange rates or commodity prices, either generally or under specific contingencies entered into for the purposes of hedging a Company’s exposure to interest or exchange rates, loan credit exchanges, security or currency valuations or commodity prices, in each case not for speculative purposes, including any “swap agreement” as that term is defined in Section 101(53B)(A) of the Bankruptcy Code.

“**Hedging Obligations**” shall mean obligations under or with respect to Hedging Agreements.

“**Hindalco**” shall mean Hindalco Industries Limited, a corporation organized under the laws of India.

“**HMRC DT Treaty Passport Scheme**” shall mean the Double Taxation Treaty Passport Scheme as implemented by HM Revenue & Customs from September 1, 2010, in relation to corporate lenders.

“**Holdings**” shall mean (i) prior to the consummation of the Permitted Holdings Amalgamation, (x) if any transaction described in clause (b), (c) or (f) of the definition of Permitted Reorganization Actions has not occurred, AV Metals or (y) AV Minerals, and (ii) upon and after the consummation of the Permitted Holdings Amalgamation, Successor Holdings.

“**IFRS**” shall mean International Financial Reporting Standards consistently applied.

“**Immaterial Subsidiary**” shall mean, at any date of determination, any Subsidiary that, together with all other Subsidiaries then constituting Immaterial Subsidiaries (i) contributed 5.0% or less of Consolidated EBITDA for the period of four fiscal quarters most recently ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination, (ii) had consolidated assets representing 5.0% or less of the Consolidated Total Assets on the last day of the most recent fiscal quarter ended for which financial statements have been or are required to have been delivered pursuant to Section 5.01(a) or 5.01(b) prior to the date of determination, and (iii) is not a Loan Party on the Closing Date.

“**Increase Effective Date**” shall have the meaning assigned to such term in Section 2.23(a).

“**Increase Joinder**” shall have the meaning assigned to such term in Section 2.23(c).

“**Incremental Revolving Commitment**” shall have the meaning assigned to such term in Section 2.23(a).

“**Indebtedness**” of any person shall mean, without duplication, (a) all obligations of such person for borrowed money or advances; (b) all obligations of such person evidenced by bonds, debentures, notes or similar instruments; (c) all obligations of such person under conditional sale or other title retention agreements relating to property purchased by such person; (d) all obligations of such person issued or assumed as the deferred purchase price of property or services (excluding trade accounts payable and accrued obligations incurred in the ordinary course of business on normal trade terms and not overdue by more than ninety (90) days (other than such overdue trade accounts payable being contested in good faith and by proper proceedings, for which appropriate reserves are being maintained with respect to such circumstances in accordance with U.S. GAAP or other applicable accounting standards)); (e) all Indebtedness of others secured by any Lien on property owned or acquired by such person, whether or not the obligations secured thereby have been assumed, but limited to the fair market value of such property; (f) all Capital Lease Obligations, Purchase Money Obligations and Synthetic Lease Obligations of such person; (g) all Hedging Obligations to the extent required to be reflected on a balance sheet of such person; (h) all Attributable Indebtedness of such person; (i) all obligations of such person for the reimbursement of any obligor in respect of letters of credit, letters of guaranty, bankers’ acceptances and similar credit transactions; (j) all obligations of such person under any Qualified Securitization Transaction; and (k) all Contingent Obligations of such person in respect of Indebtedness or obligations of others of the kinds referred to in clauses (a) through (j) above. The Indebtedness of any person shall include the Indebtedness of any other entity (including any partnership in which such person is a general partner) to the extent such person is liable therefor as a result of such person’s ownership interest in or other relationship with such entity, except (other than in the case of general partner liability) to the extent that the terms of such Indebtedness expressly provide that such person is not liable therefor.

“**Indemnified Taxes**” shall mean all Taxes other than Excluded Taxes and Other Taxes.

“**Indemnatee**” shall mean Agent Indemnitees, Lender Indemnitees, Issuing Bank Indemnitees, Wells Fargo Indemnitees and Receiver Indemnitees.

“**Indenture Permitted Debt**” shall mean permitted debt of the type referred to in clause (b) of the definition of “Permitted Debt” contained in the ~~New~~ Senior Notes Agreements (or equivalent basket in any other Material Indebtedness).

“**Information**” shall have the meaning assigned to such term in Section 11.12.

~~“**Initial Issuing Bank**” shall mean Wells Fargo Bank, National Association as initial Issuing Bank, and its successors in such capacity pursuant to Section 2.18(d), in its capacity as issuer of U.S. Letters of Credit and European Letters of Credit issued by it.~~

“**Initial German Receivables Purchase Agreement**” shall have the meaning assigned to such term in the definition of “Receivables Purchase Agreement”.

“**Initial U.S. Borrower**” shall have the meaning assigned to such term in the preamble hereto.

“Initiating Company” shall have the meaning assigned to such term in the definition of “Series of Cash Neutral Transactions”.

“Insolvency Proceeding” any case or proceeding commenced by or against a Person under any state, federal or foreign law for, or any agreement of such Person to, (a) the entry of an order for relief under the Bankruptcy Code, or any other Debtor Relief Law; (b) the appointment of a receiver, trustee, liquidator, administrator, examiner, conservator or other custodian for such Person or any part of its property; or (c) an assignment or trust mortgage for the benefit of creditors.

“Instruments” shall mean all “instruments,” as such term is defined in the UCC, in which any Person now or hereafter has rights.

“Insurance Policies” shall mean the insurance policies and coverages required to be maintained by each Loan Party which is an owner of Mortgaged Property with respect to the applicable Mortgaged Property pursuant to Section 5.04 and all renewals and extensions thereof.

“Insurance Requirements” shall mean, collectively, all provisions of the Insurance Policies, all requirements of the issuer of any of the Insurance Policies and all orders, rules, regulations and any other requirements of the National Board of Fire Underwriters (or any other body exercising similar functions) binding upon each Loan Party which is an owner of Mortgaged Property and applicable to the Mortgaged Property or any use or condition thereof.

“Intellectual Property” shall have the meaning assigned to such term in Section 3.06(a).

“Interbank Rate” shall mean, for any period, (i) in respect of Loans denominated in Dollars, the Federal Funds Rate, and (ii) in respect of Loans denominated in any other currency, the Administrative Agent’s cost of funds for such period.

“Intercompany Note” shall mean a promissory note substantially in the form of Exhibit P, or such other form as may be agreed to by the Administrative Agent in its sole discretion.

“Intercreditor Agreement” shall mean that certain Intercreditor Agreement, dated as of December 17, 2010, by and among the Companies party thereto, the administrative agent and the collateral agent under the Original Credit Agreement, the Term Loan Collateral Agent, the Term Loan Administrative Agent, Administrative Agent and Collateral Agent (each pursuant to a joinder agreement executed as of the Existing Credit Agreement Closing Date), and such other persons as may become party thereto from time to time pursuant to the terms thereof, as the same may be amended, restated, supplemented or otherwise modified from time to time.

“Interest Election Request” shall mean a request by Administrative Borrower to convert or continue a Borrowing in accordance with Section 2.08(b), substantially in the form of Exhibit E.

“Interest Payment Date” shall mean (a) with respect to any Base Rate Loan (including any Swingline Loan), the first ~~Business Day~~ of calendar day of each month to occur during any period in which such Loan is outstanding, (b) with respect to any Eurocurrency Loan or EURIBOR Loan, the last day of the Interest Period applicable to the Borrowing of which such Loan is a part and, in the case of a Eurocurrency Loan or EURIBOR Loan with an Interest Period of more than three months’ duration, each day prior to the last day of such Interest Period that occurs at intervals of three months’ duration after the first day of such Interest Period, and (c) with respect to any Revolving Loan or Swingline Loan, the Maturity Date thereof or such earlier date on which the Revolving Commitments are terminated, as the case may be.

“Interest Period” shall mean (a) in the case of any Eurocurrency Loan, the applicable Eurocurrency Interest Period and (b) in the case of any EURIBOR Loan, the applicable EURIBOR Interest Period.

“Inventory” shall mean all “inventory,” as such term is defined in the UCC, wherever located, in which any Person now or hereafter has rights.

“Inventory Appraisal” shall mean the most recent inventory appraisal conducted by Sector 3 or another independent appraisal firm and delivered pursuant to Section 5.07(c), hereof.

“Inventory Reserve” shall mean reserves established by Administrative Agent in its Permitted Discretion in accordance with Section 2.01(d) to reflect factors that may negatively impact the value of Inventory, including change in salability, obsolescence (excluding items that can be recycled as scrap), seasonality, theft, shrinkage, imbalance, change in composition or mix, markdowns and vendor chargebacks.

“Investments” shall have the meaning assigned to such term in Section 6.04.

“Irish Guarantor” shall mean each Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Ireland party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company organized in Ireland that ~~is required to become~~ becomes a Guarantor pursuant to the terms hereof.

“Irish Security Agreement” shall mean, collectively (i) any Security Agreement ~~substantially in the form of Exhibit M-6~~, including all subparts thereto, among ~~the any~~ Irish Guarantor ~~Guarantors~~ (and such other Persons as may be party thereto) and the Collateral Agent, among others, for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Irish Guarantor or any Person who is the holder of Equity Interests in any Irish Guarantor in favor of the Collateral Agent and/or the Term Loan Collateral Agent ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Ireland (or any subdivision thereof),

securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Issuing Bank**” shall mean, as the context may require, (a) as of the ~~Initial~~ Amendment No. 2 Effective Date, the Existing Issuing ~~Bank~~Banks; (b) any other Lender that is a Swiss Qualifying Bank that may become an Issuing Bank pursuant to Section 2.18(d) or (e) in its capacity as issuer of U.S. Letters of Credit and European Letters of Credit issued by such Lender; (c) any other Lender that may become an Issuing Bank pursuant to Section 2.18(f), but solely in its capacity as issuer of Existing Letters of Credit; or (d) collectively, all of the foregoing. Any Issuing Bank may, in its discretion, arrange for one or more U.S. Letters of Credit or European Letters of Credit to be issued by Affiliates of such Issuing Bank (so long as each such Affiliate is a Swiss Qualifying Bank), in which case the term “Issuing Bank” shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate.

“**Issuing Bank Indemnitees**” shall mean each Issuing Bank and their officers, directors, employees, Affiliates, agents and attorneys.

“**Issuing Country**” shall have the meaning assigned to such term in Section 11.19(a).

“**Joinder Agreement**” shall mean a joinder agreement substantially in the form of Exhibit F, or such other form as may be agreed to by the Administrative Agent in its sole discretion.

“**Joinder Requirements**” shall have the meaning assigned to such term in clause (i) of the proviso to the definition of Permitted Reorganization Actions.

“**Joint Venture**” shall mean any person (a) that is not a direct or indirect Subsidiary of Holdings, and (b) in which ~~Parent Borrower~~the Designated Company, in the aggregate, together with its Subsidiaries, is directly or indirectly, the beneficial owner of 5% or more of any class of Equity Interests of such person.

“**Joint Venture Subsidiary**” shall mean each of (i) Aluminum Company of Malaysia Berhad and (ii) any other person that is a Subsidiary in which persons other than Holdings or its Affiliates own 10% or more of the Equity Interests of such person, excluding, to the extent they become Restricted Subsidiaries of the ~~Parent Borrower~~Designated Company after the Closing Date, Logan and Norf GmbH.

“**Judgment Currency**” shall have the meaning assigned to such term in Section 11.18(a).

“**Judgment Currency Conversion Date**” shall have the meaning assigned to such term in Section 11.18(a).

“**Junior Lien**” means a Lien designated as a “Subordinated Lien” under the Intercreditor Agreement on all or any portion of the Collateral, but only to the extent (i) any such Lien constitutes “Subordinated Liens” under, and as defined in, the Intercreditor Agreement (it being understood that such Subordinated Lien will be a junior, “silent” lien with respect to the Liens securing the Secured Obligations, as provided in the Intercreditor Agreement) and (ii) the holders of such Indebtedness (or a trustee, agent or other representative of such holders) secured by such Lien have become a party to the Intercreditor Agreement through the execution and delivery of joinders thereto.

“**Junior Secured Indebtedness**” shall mean Indebtedness of a Loan Party that is secured by a Junior Lien incurred, created, assumed or permitted to exist in reliance of Section 6.01(l) or (y); provided that no such Indebtedness shall constitute Junior Secured Indebtedness unless at all

times it meets the following requirements: (i) the terms of such Indebtedness do not require any amortization, mandatory prepayment or redemption or repurchase at the option of the holder thereof (other than customary offers to purchase upon a change of control or asset sale) earlier than the earlier of the final maturity date of such Indebtedness and 180 days after the Maturity Date, (ii) such Indebtedness has terms and conditions (excluding pricing, premiums and subordination terms) that, when taken as a whole, are not materially more restrictive or less favorable to the Companies, and are not materially less favorable to the Lenders, than the terms of the Term Loan Documents (or, if the Term Loan Documents are no longer in effect, than the Term Loan Documents as in effect immediately prior to their termination) (except with respect to terms and conditions that are applicable only after the Maturity Date), (iii) the Liens securing such Indebtedness, if any, shall be subordinated to the Liens securing the Secured Obligations on a junior “silent” basis in a manner satisfactory to the Administrative Agent (provided that the terms of the Intercreditor Agreement as it relates to subordination are hereby acknowledged as satisfactory) (and the holders of such Indebtedness shall not have any rights with respect to exercising remedies pursuant to such Liens) and such Liens shall only be on assets that constitute Collateral, (iv) the security agreements relating to such Indebtedness (together with the Intercreditor Agreement) reflect the Junior Lien nature of the security interests and are otherwise substantially the same as the applicable Pari Passu Loan Documents (with differences as are reasonably satisfactory to the Administrative Agent), (v) such Indebtedness and the holders thereof or the Senior Representative thereunder shall be subject to the Intercreditor Agreement and the Liens securing such Indebtedness shall be subject to the Intercreditor Agreement and (vi) after giving effect to the incurrence of such Indebtedness and to the consummation of any Permitted Acquisition or other Investment or application of funds made with the proceeds of such incurrence on a Pro Forma Basis (Leverage), the Consolidated Interest Coverage Ratio at such date shall be greater than 2.0 to 1.0.

“**Junior Secured Indebtedness Documents**” all documents executed and delivered with respect to the Junior Secured Indebtedness or delivered in connection therewith.

“**Land Registry**” shall mean the Land Registry of England and Wales.

“**Landlord Access Agreement**” shall mean a Landlord Access Agreement, substantially in the form of Exhibit G, or such other form as may reasonably be acceptable to the Administrative Agent.

“**LC Application**” shall mean an application to an Issuing Bank for issuance of a Letter of Credit in accordance with the terms of Section 2.18, in form and substance satisfactory to such Issuing Bank.

“**LC Commitment**” shall mean the commitment of the ~~Initial Issuing Bank~~Banks to issue U.S. Letters of Credit and European Letters of Credit pursuant to Section 2.18. The total amount of the LC Commitment ~~shall initially be \$125,000,000, but shall in no event as of the Amendment No. 2 Effective Date shall be \$125,000,000; provided that on the Aleris Acquisition Closing Date, such commitment shall automatically be increased to the greater of (a) \$175,000,000 and (b) the Adjusted Total Revolving Commitment; provided, further, that in no event shall the LC Commitment~~ exceed the Adjusted Total Revolving Commitment. The LC Commitment of any Issuing Bank at any time shall, subject to Section 2.18, be an amount mutually agreed by the Designated Company and such Issuing Bank from time to time, and in any case shall not exceed \$125,000,000 (or, on and after the Aleris Acquisition Closing Date, \$175,000,000).

“**LC Condition**” shall mean the following conditions necessary for issuance of a Letter of Credit: (a) each of the conditions set forth in Section 4.02 (and, in the case of the initial Credit Extension, Section 4.01); (b) after giving effect to such issuance, (i) ~~(A) the aggregate LC Exposure of all Issuing Banks does not exceed the aggregate LC Commitment, the Total Revolving Exposure does not exceed the lesser of (A) the Total Borrowing Base and (B) the Total Revolving Commitments, (ii) (A) the Total Adjusted Revolving Exposure (German) Commitments of all Issuing Banks and (B) the LC Exposure of each Issuing Bank does not exceed the Total Adjusted Borrowing Base (German), (B) the Total Adjusted Revolving Exposure (Swiss) does not exceed the Total Adjusted Borrowing Base (Swiss) and (C) the Total Adjusted Revolving Exposure does not exceed the Total Adjusted Borrowing Base and LC Commitment of such Issuing Bank, (ii) the Loan Parties shall be in compliance with the Funding Conditions, and~~ (iii) no Overadvance exists; (c) the expiration date of such Letter of Credit is not later than the Letter of Credit Expiration Date and (unless, solely with respect to standby Letters of Credit for which beneficiary is a customs, tax, or other governmental authority, the Issuing Bank is Wells Fargo, or another Issuing Bank who otherwise agrees in its sole discretion) is no more than 365 days from issuance, provided that such Letters of Credit may contain automatic extension provisions in accordance with Section 2.18(a)(v); (d) the purpose and form of the proposed Letter of Credit is satisfactory to Administrative Agent and the applicable Issuing Bank in their discretion, (e) where the Letter of Credit is a Standby Letter of Credit, the beneficiary of such Letter of Credit is not resident in Ireland or, where the beneficiary is a legal person, its place of establishment to which the Letter of Credit relates is not in Ireland, ~~and~~ (f) the Applicable Administrative Borrower (or, with respect to Canadian Dollar Denominated Letters of Credit, ~~Parent~~the Canadian Borrower) shall be a co-applicant, and therefore jointly and severally liable, with respect to each Letter of Credit issued for the account of another Subsidiary of Holdings, and (g) the request for any Letter of Credit shall be subject to the applicable Issuing Bank’s authentication procedures with results satisfactory to such Issuing Bank.

“**LC Disbursement**” shall mean a payment or disbursement made by the applicable Issuing Bank pursuant to a drawing under a Letter of Credit.

“**LC Documents**” shall mean all documents, instruments and agreements (including LC Requests and LC Applications) delivered by Borrowers or any other Person to an Issuing Bank or an Agent in connection with issuance, amendment or renewal of, or payment under, any Letter of Credit.

“**LC Exposure**” shall mean, at any time, the sum of the U.S. LC Exposure and European LC Exposure at such time.

“**LC Obligations**” shall mean the sum (without duplication) of (a) all amounts owing by Borrowers for any drawings under Letters of Credit; (b) the stated amount of all outstanding Letters of Credit; and (c) all fees and other amounts owing with respect to Letters of Credit.

“**LC Participation Fee**” shall have the meaning assigned to such term in Section 2.05(c).

“**LC Request**” shall mean a request in accordance with the terms of Section 2.18 and substantially in the form of Exhibit H, or such other form as shall be approved by the Administrative Agent.

“**Leases**” shall mean any and all leases, subleases, tenancies, options, concession agreements, rental agreements, occupancy agreements, franchise agreements, access agreements and any other agreements (including all amendments, extensions, replacements, renewals, modifications and/or guarantees thereof), whether or not of record and whether now in existence or hereafter entered into, affecting the use or occupancy of all or any portion of any Real Property.

“**Lender Indemnitees**” shall mean the Lenders and their Related Parties.

“**Lenders**” shall mean (a) each financial institution that is a party hereto on the Closing Date (including pursuant to the Amendment Agreement) or that becomes a party hereto pursuant to an Increase Joinder and (b) any financial institution that has become a party hereto pursuant to an Assignment and Assumption, other than, in each case, any such financial institution that has ceased to be a party hereto pursuant to an Assignment and Assumption. Unless the context clearly indicates otherwise, the term “Lenders” shall include each Swingline Lender.

“**Letter of Credit**” shall mean any (i) Standby Letter of Credit, (ii) Commercial Letter of Credit, and (iii) any indemnity, guarantee, exposure transmittal memorandum or similar form of credit support for the benefit of the any Borrower, in each case, issued (or deemed issued) or to be issued by an Issuing Bank for the account of any Borrower pursuant to Section 2.18, including any U.S. Letter of Credit and any European Letter of Credit.

“**Letter of Credit Expiration Date**” shall mean the date which is ten (10) days prior to the Maturity Date ~~or, in the case of each Letter of Credit such later date as agreed to by the Administrative Agent and the Issuing Bank that issued such Letter of Credit in their sole discretion, solely to the extent that such Letter of Credit is cash collateralized pursuant to Section 2.18(c).~~

“**LIBOR Rate**” shall mean ~~with respect to any Interest Period, the applicable rate per annum rate appearing on Reuters (the “Service”) Screen LIBOR01 page (or on any successor or substitute page of such Service, or any successor to or substitute for such Service) for deposits in the applicable currency, two (2) the rate per annum as published by ICE Benchmark Administration Limited (or any successor page or other commercially available source as the~~ Administrative Agent may designate from time to time) as of 11:00 a.m., London time, two Business Days prior to the commencement of the requested Interest Period, for a term, and in an amount, comparable to the Interest Period and the amount of the Eurocurrency Borrowing requested (whether as an initial Eurocurrency Borrowing or as a continuation of a Eurocurrency Borrowing or as a conversion of a Base Rate Borrowing to a Eurocurrency Borrowing) by any Borrower in accordance with ~~the~~this Agreement (and, if any such published rate is below zero, ~~LIBOR~~then the rate determined pursuant to this definition shall be deemed to be zero) ~~, which, Each~~ determination of the LIBOR Rate shall be made by the Administrative Agent and shall be

conclusive in the absence of manifest error. ~~In the event that such rate is not available at such time for any reason, then “LIBOR” with respect to a Borrowing for such Interest Period shall be the rate at which deposits in the relevant Approved Currency of \$5,000,000 (or the Dollar Equivalent thereof) and for a maturity comparable to such Interest Period are offered by the principal London office of Administrative Agent in immediately available funds in the London interbank market at approximately 11:00 a.m. London time on the day which is two (2) Business Days prior to the commencement of such Interest Period (and, if any such rate is below zero, LIBOR shall be deemed to be zero).~~

“**Lien**” shall mean, with respect to any property, (a) any mortgage (or mandate to vest the same), deed of trust, lien, pledge, encumbrance, privilege, charge, assignment, hypothecation, security interest or similar encumbrance of any kind or any arrangement to provide priority or preference in respect of such property or any filing of any financing statement or any financing change statement under the UCC, the PPSA or any other similar notice of lien under any similar notice or recording statute of any Governmental Authority (other than any unauthorized notice or filing filed after the Closing Date for which there is not otherwise any underlying lien or obligation, so long as the Borrowers are (if aware of same) using commercially reasonable efforts to cause the removal of same), including any easement, right-of-way or other encumbrance on title to Real Property, in each of the foregoing cases whether voluntary or imposed by law, and any agreement to give any of the foregoing; (b) the interest of a vendor or a lessor under any conditional sale agreement, capital lease or title retention agreement (or any financing lease having substantially the same economic effect as any of the foregoing) relating to such property; and (c) in the case of securities, any purchase option, call or similar right of a third party with respect to such securities.

“**Loan Documents**” shall mean this Agreement, the Amendment Agreement, any Borrowing Base Certificate, the Intercreditor Agreement, the Contribution, Intercompany, Contracting and Offset Agreement, the Notes (if any), the Security Documents, each Foreign Guarantee, the Fee Letter, each Receivables Purchase Agreement, and all other pledges, powers of attorney, consents, assignments, certificates, agreements or documents, whether heretofore, now or hereafter executed by or on behalf of any Loan Party for the benefit of any Agent or any Lender in connection with this Agreement.

“**Loan Modification Agreement**” shall have the meaning assigned to such term in Section 11.02(g).

“**Loan Modification Offer**” shall have the meaning assigned to such term in Section 11.02(g).

“**Loan Parties**” shall mean Holdings (unless Holdings has been released as a Guarantor pursuant to Section 7.09(d)), the Borrowers and the Subsidiary Guarantors.

“**Loans**” shall mean, as the context may require, a Revolving Loan or a Swingline Loan.

“**Logan**” shall mean Logan Aluminum Inc., a Delaware corporation.

“**Logan Location**” shall mean the premises of Logan Aluminum Inc., Route 431, North Russellville, Kentucky 42276.

~~“**Madeira Guarantor**” shall mean each Restricted Subsidiary of Parent Borrower organized in Madeira party hereto as a Guarantor, and each other Restricted Subsidiary of Parent Borrower organized in Madeira that is required to become a Guarantor pursuant to the terms hereof.~~

~~“**Madeira Security Agreements**” shall mean, collectively (i) any Security Agreements substantially in the form of Exhibit M-9, including all subparts thereto, among the Madeira Guarantor (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties and (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Madeira Guarantor or any Person who is the holder of Equity Interests in any Madeira Guarantor in favor of the Collateral Agent and the Secured Parties and, in the case of an Assignment of Credits Agreement, also in favor of the Term Loan Collateral Agent and the secured parties under the Term Loan Credit Agreement, and any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of~~

~~the Loan Documents that is governed by the laws of Portugal (or any subdivision thereof), securing the Secured Obligations, entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.~~

“**Management Fees**” shall have the meaning assigned to such term in Section 6.08(c).

“**Mandatory Cost**” shall mean the per annum percentage rate calculated by the Administrative Agent in accordance with Annex III.

“**Margin Stock**” shall have the meaning assigned to such term in Regulation U.

“**Material Adverse Effect**” shall mean (a) a material adverse effect on the business, property, results of operations, or financial condition of the Loan Parties and their Restricted Subsidiaries, taken as a whole; (b) a material impairment of the ability of the Loan Parties to perform their payment and other material obligations under the Loan Documents; (c) a material impairment of the rights of or benefits or remedies available to the Lenders, the Administrative Agent or the Collateral Agent under the Loan Documents, taken as a whole; or (d)(i) a material adverse effect on the Revolving Credit Priority Collateral or the Liens in favor of the Collateral Agent (for its benefit and for the benefit of the other Secured Parties) on such Collateral or the priority of such Liens, in each case for this clause (d)(i) taken as a whole, or (ii) a material adverse effect on the Pari Passu Priority Collateral or the Liens in favor of the Collateral Agent (for its benefit and for the benefit of the other Secured Parties) on such Collateral or the priority of such Liens, in each case for this clause (d)(ii) taken as a whole.

“**Material Indebtedness**” shall mean (a) Indebtedness under the Term Loan Documents and any Permitted Term Loan Facility Refinancings thereof, (b) the Permitted Short Term Indebtedness, (c) Indebtedness under the ~~New~~ Senior Notes, the Additional Senior Secured Indebtedness, the Junior Secured Indebtedness, the Other Secured Indebtedness and any Permitted Refinancings of any thereof in each case in an aggregate outstanding principal amount exceeding \$100,000,000 and (ed) any other Indebtedness (other than the Loans and Letters of Credit, and other than intercompany Indebtedness of the Companies permitted hereunder) of the Loan Parties in an aggregate outstanding principal amount exceeding \$100,000,000.

“**Material Subsidiary**” shall mean any Subsidiary of ~~Parent Borrower~~the Designated Company that is not an Immaterial Subsidiary.

“**Maturity Date**” shall mean the ~~earlier of (i) September 14, 2022,~~earliest of:

(i) April 15, 2024;

(ii) in the event that (1) any Indebtedness of the type referred to in Sections 6.01(b)(ii) or (iii), (l), (s), (t), (v), (w) or (y) (but in the case of Section 6.01(y), only to the extent constituting secured Indebtedness of any Loan Party), or (2) any Indebtedness (other than Loans) that constitutes Permitted Short Term Refinancing Indebtedness (regardless of whether such Permitted Short Term Refinancing Indebtedness was incurred under a provision described in clause (1) or otherwise), in the case of clauses (1) and (2), is outstanding 90 days prior to its maturity date, the date that is 90 days prior to the maturity date for such Indebtedness unless (A) such Indebtedness has, or has been refinanced to have, a maturity date six months or more after the scheduled Maturity Date or (B) to the extent not so refinanced, cash collateralized, or defeased in cash, after giving effect to an Availability Reserve for such outstanding Indebtedness, the Borrowers would be able to fulfill the conditions for prepayments of indebtedness set forth in clause (c) of the definition of “Availability Conditions” and;

(iii) in the event that any Indebtedness of the type referred to in Section 6.01(q) (a) having a single maturity of principal of more than \$100,000,000 or (b) having combined maturities within any six-month period of more than \$100,000,000, is outstanding 90 days prior to (I) in the case of Indebtedness referred to in clause (iii)(a) above, its maturity date, or (II), in the case of Indebtedness referred to in clause (iii)(b) above, the first maturity date of any such Indebtedness, the date that is 90 days prior to such maturity date (or first maturity date, as the case may be) unless (A) such Indebtedness (maturing on such maturity date, in the case of Indebtedness referred to in clause (iii)(a) above, or within such six-month period, in the case of Indebtedness referred to in clause (iii)(b) above) (to the extent greater than \$100,000,000) has been refinanced to have a maturity date six months after the scheduled Maturity Date or (B) to the extent not so refinanced, cash collateralized, or defeased in cash, after giving effect to an Availability Reserve for such outstanding Indebtedness in excess of \$100,000,000, the Borrowers would be able to fulfill the conditions for prepayments of indebtedness set forth in clause (c) of the definition of “Availability Conditions”-; and

(iv) in the event that any Permitted Short Term Indebtedness is outstanding 60 days prior to its maturity date, the date that is 60 days prior to the maturity date for such Indebtedness (or, if the company has commenced a Permitted Refinancing of the Short Term Loan Agreement that is continuing on and after the date that is 60 days prior to the maturity date of the Short Term Loan Agreement, and that is scheduled to be and is capable of being completed prior to the date that is 45 days prior to the maturity date of the Short Term Loan Agreement, the date that is 45 days

prior to the maturity date for such Indebtedness), unless such Indebtedness has been refinanced to have a maturity date six months or more after the scheduled Maturity Date.

“**Maximum Rate**” shall have the meaning assigned to such term in Section 11.14.

“**Mexican Accounts**” shall mean Accounts with respect to which the Account Debtor either (A) maintains its Chief Executive Office in Mexico, or (B) is organized under the laws of Mexico or any state, territory, province or subdivision thereof.

“**Minimum Currency Threshold**” shall mean (w) with regard to Dollar Denominated Loans, (i) an integral multiple of \$1,000,000 and not less than \$5,000,000 for Base Rate Loans and (ii) an integral multiple of \$1,000,000 and not less than \$5,000,000 for Eurocurrency Loans, (x) with regard to Euro Denominated Loans, an integral multiple of €1,000,000 and not less than €5,000,000 and (y) with regard to GBP Denominated Loans, not less than GBP2,000,000 and, if greater, an integral multiple of GBP1,000,000.

“**Moody’s**” shall mean Moody’s Investors Service, Inc.

“**Mortgage**” shall mean an agreement, including, but not limited to, a mortgage, charge, deed of trust, deed of hypothec or any other document, creating and evidencing a Lien on a Mortgaged Property, which shall be substantially in the form of Exhibit J or, subject to the terms of the Intercreditor Agreement, other form reasonably satisfactory to the Collateral Agent, in each case, with such schedules and including such provisions as shall be necessary to conform such document to applicable local or foreign law or as shall be customary under applicable local or foreign law.

“**Mortgaged Property**” shall mean (a) each Real Property identified as a Mortgaged Property on Schedule 8(a) to the Perfection Certificate ~~dated the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, (b) each future Real Property covered by the terms of any Mortgage, and (c) each Real Property, if any, which shall be subject to a Mortgage (or other Lien created by a Security Document) delivered after the Closing Date pursuant to Section 5.11(c); provided that, notwithstanding anything in this Agreement or any other Loan Document to the contrary, (i) Excluded Property and (ii) Real Property located in the United States, in the case of clauses (i) and (ii), shall not constitute, and shall not be required to become, Mortgaged Property.

“**Multiemployer Plan**” shall mean a multiemployer plan within the meaning of Section 4001(a)(3) or Section 3(37) of ERISA (a) to which any Company or any ERISA Affiliate is then making or accruing an obligation to make contributions; (b) to which any Company or any ERISA Affiliate has within the preceding six plan years made contributions; or (c) with respect to which any Company could incur liability.

“**Net Cash Proceeds**” shall mean:

(a) with respect to any Asset Sale, the cash proceeds received by Holdings, the ~~Parent Borrower~~ Designated Company or any of its Restricted Subsidiaries (including cash proceeds subsequently received (as and when received by Holdings, the ~~Parent Borrower~~ Designated Company or any of its Restricted Subsidiaries) in respect of noncash consideration initially received) net of (without duplication) (i) selling expenses (including reasonable brokers’ fees or commissions, legal, accounting and other professional and transactional fees, transfer and similar taxes and Administrative Borrower’s good faith estimate of income taxes paid or payable in connection with such sale and repatriation Taxes that are or would be payable in connection with any sale by a Restricted Subsidiary); (ii) amounts provided as a reserve, in accordance with GAAP, against (x) any liabilities under any indemnification obligations associated with such Asset Sale or (y) any other liabilities retained by Holdings, the ~~Parent Borrower~~ Designated Company or any of its Restricted Subsidiaries associated with the properties sold in such Asset Sale (provided that, to the extent and at the time any such amounts are released from such reserve, such amounts shall constitute Net Cash Proceeds); (iii) Administrative Borrower’s good faith estimate of payments required to be made with respect to unassumed liabilities relating to the properties sold within ninety (90) days of such Asset Sale (provided that, to the extent such cash proceeds are not used to make payments in respect of such unassumed liabilities within ninety (90) days of such Asset Sale, such cash proceeds shall constitute Net Cash Proceeds); (iv) the principal amount, premium or penalty, if any, interest and other amounts on any Indebtedness for borrowed money (other than Pari Passu Secured Obligations) which is secured by a Lien on the properties sold in such Asset Sale (so long as such Lien was permitted to encumber such properties under the Loan Documents at the time of such sale) and which is repaid with such proceeds (other than any such Indebtedness assumed by the purchaser of such properties); and (v) so long as any Pari Passu Secured Obligations remain outstanding, amounts required to be prepaid under the Pari Passu Loan Documents from the proceeds of Pari Passu Priority Collateral (provided that, in the case of an Asset Sale consisting of a sale or other disposition of all or substantially all of the property or assets or business of a Loan Party or Restricted Subsidiary, or the Equity Interests of a Restricted Subsidiary, this clause (v) shall be limited to that portion of the cash proceeds in excess of the net book value of Revolving Credit Priority Collateral which is subject to such Asset Sale); and

(b) with respect to any Casualty Event, the cash insurance proceeds, condemnation awards and other compensation received in respect thereof, net of (i) all reasonable costs and expenses incurred in connection with the collection of such proceeds, awards or other compensation in respect of such Casualty Event; and (ii) so long as any Pari Passu Secured Obligations remain outstanding, amounts required to be prepaid under the Pari Passu Loan Documents in respect of cash insurance proceeds, condemnation awards and other compensation received in respect of Pari Passu Priority Collateral;

provided, however, that (i) Net Cash Proceeds arising from any Asset Sale or Casualty Event by or applicable to a non-Wholly Owned Subsidiary shall equal the amount of such Net Cash

Proceeds calculated as provided above less the percentage thereof equal to the percentage of any Equity Interests of such non-Wholly Owned Subsidiary not owned by Holdings, ~~Parent Borrower~~ the Designated Company and its Restricted Subsidiaries and (ii) so long as the Pari Passu Secured Obligations remain outstanding (x) in the case of an Asset Sale consisting of a sale of Equity Interests of a Subsidiary, the Net Cash Proceeds of such sale shall be deemed to equal the book value of Revolving Credit Priority Collateral included in such sale as of the date of such sale and (y) in the case of an Asset Sale consisting of a sale or other disposition of all or substantially all of the property and assets or business of a Loan Party or Restricted Subsidiary, the net cash proceeds of any such sale shall be deemed to equal the book value of the Revolving Credit Priority Collateral included in such sale (and the

expenses relating to such Asset Sale shall be allocated proportionately among the Pari Passu Priority Collateral and the Revolving Credit Priority Collateral).

“**Net Recovery Cost Percentage**” shall mean the fraction, expressed as a percentage, (a) the numerator of which is the amount equal to the recovery on the aggregate amount of the Inventory at such time on a “net orderly liquidation value” basis as set forth in the most recent Inventory Appraisal received by Collateral Agent in accordance with Section 9.02, net of liquidation expenses, commissions and other expenses reasonably anticipated in the disposition of such assets, and (b) the denominator of which is the original Cost of the aggregate amount of the Inventory subject to appraisal.

~~“**New Senior Note Agreements**” shall mean the indentures dated as of December 17, 2010, pursuant to which the New Senior Notes were issued.~~

~~“**New Senior Note Documents**” shall mean the New Senior Notes, the New Senior Note Agreements, the New Senior Note Guarantees and all other documents executed and delivered with respect to the New Senior Notes or the New Senior Note Agreements.~~

~~“**New Senior Note Guarantees**” shall mean the guarantees of the Loan Parties (other than Holdings and the Parent Borrower) pursuant to the New Senior Note Agreement.~~

~~“**New Senior Notes**” shall mean the Parent Borrower’s 8.375% Senior Notes due 2017 and 8.75% Senior Notes due 2020, each issued pursuant to the New Senior Note Agreements and any senior notes issued pursuant to a Permitted Refinancing of the New Senior Notes (including any Registered Equivalent Notes).~~

“**NKL**” shall mean Novelis Korea Limited.

“**NKL Share Repurchase**” shall mean the repurchase by NKL of Equity Interests of NKL for cash consideration derived from all or a portion of the proceeds of the Ulsan Share Sale, which may be structured as a share cancellation, a reduction in par value, a share consolidation and reduction in share value, or any other legal structure resulting in the reduction of Equity Interests in NKL in exchange for cash consideration.

“**Non-consolidated Affiliate**” shall mean ~~each of~~ (a) Norf GmbH, MiniMRF LLC (Delaware), and Consorcio Candonga (unincorporated Brazil), in each case so long as they are not a Subsidiary of the ~~Parent Borrower~~ Designated Company, (b) the Ulsan JV Subsidiary, solely to the extent that (i) such Person is not otherwise included in the consolidated financial results of the Designated Company and its Restricted Subsidiaries and (ii) the requirement set forth in clause (c)(ii) below remains true in respect of the Ulsan JV Subsidiary, and (c) any other Person formed or acquired by the Designated Company or any of its Restricted Subsidiaries, in the case of this clause (c), so long as (i) such Person is not a Subsidiary of the Designated Company and (ii) the Designated Company owns, directly or indirectly, Equity Interests in such Restricted Subsidiary representing at least 50% of the voting power of all Equity Interests

entitled (without regard to the occurrence of any contingency) to vote in the election of the Board of Directors (or equivalent governing body) of such Person.

“**Non-consolidated Affiliate Debt**” shall mean with respect to the Non-consolidated Affiliates, as of any date of determination and without duplication, the Consolidated Total Net Debt of the Non-consolidated Affiliates and their Subsidiaries (determined as if references to the ~~Parent Borrower~~ Designated Company and the Restricted Subsidiaries in the definition of Consolidated Total Net Debt were references to Non-consolidated Affiliates and their Subsidiaries).

“**Non-consolidated Affiliate EBITDA**” shall mean with respect to the Non-consolidated Affiliates for any period, the amount for such period of Consolidated EBITDA (Leverage) of such Non-consolidated Affiliates and their Subsidiaries (determined as if references to the ~~Parent Borrower~~ Designated Company and the Restricted Subsidiaries in the definition of Consolidated EBITDA (Leverage) were references to Non-consolidated Affiliates and their Subsidiaries); provided that Non-consolidated Affiliate EBITDA shall not include the Non-consolidated Affiliate EBITDA of Non-consolidated Affiliates if such Non-consolidated Affiliates are subject to a prohibition, directly or indirectly, on the payment of dividends or the making of distributions, directly or indirectly, to the Designated Company or any other Borrower, to the extent of such prohibition.

“**Non-Dollar Denominated Loan**” shall mean any Loan that is not a Dollar Denominated Loan.

“**Non-Extension Notice Date**” shall have the meaning assigned to such term in Section 2.18(a)(v).

“**Non-Guarantor Subsidiary**” shall mean each Subsidiary that is not a Guarantor.

“**Non-Loan Party Jurisdiction**” shall mean each country (including any state, province or other political subdivision thereof) other than (i) the United States, Belgium, Canada, the United Kingdom, Switzerland and Germany, (ii) any other country in which a Loan Party is organized and (iii) any state, province or other political subdivision of the foregoing.

“**Non-Principal Jurisdiction**” shall mean each country in which a Loan Party is organized (and any state, province or other political subdivision thereof) other than (i) the United States, Belgium, Canada, the United Kingdom, Switzerland and Germany, (ii) any other country in

which a Loan Party is organized in respect of which Accounts are included in the Borrowing Base in accordance with Section 11.02(h) and (iii) any state, province or other political subdivision of the foregoing clauses (i) and (ii).

“**Norf GmbH**” shall mean Aluminium Norf GmbH, a limited liability company (GmbH) organized under the laws of Germany.

“**Notes**” shall mean any notes evidencing the Revolving Loans or Swingline Loans issued pursuant to this Agreement, if any, substantially in the form of Exhibit K-1 or K-2.

“**Novelis AG Acquisitions**” shall mean Novelis ~~AG, a stock corporation (AG) organized under the laws of Switzerland~~ Acquisitions LLC, a Delaware limited liability company.

“**Novelis AG Cash Pooling Agreement**” ~~shall mean a Cash Management Agreement entered into among Novelis AG and certain “European Affiliates” (as identified therein) dated February 1, 2007, together with all ancillary documentation thereto.~~ shall have the meaning assigned to such term in the preamble hereto.

“**Novelis Corporation**” shall mean Novelis Corporation, a Texas corporation.

“**Novelis Deutschland**” shall have the meaning assigned to such term in the preamble hereto.

“**Novelis Inc.**” shall mean Novelis Inc., a corporation amalgamated under the Canada Business Corporations Act.

“**Novelis Switzerland**” shall mean Novelis Switzerland SA, a company organized under the laws of Switzerland.

“**Obligation Currency**” shall have the meaning assigned to such term in Section 11.18(a).

“**Obligations**” shall mean (a) obligations of the Borrowers and the other Loan Parties from time to time arising under or in respect of the due and punctual payment of (i) the principal of and premium, if any, and interest (including interest accruing (and interest that would have accrued but for such proceeding) during the pendency of any Insolvency Proceeding, regardless of whether allowed or allowable in such proceeding) on the Loans, when and as due, whether at maturity, by acceleration, upon one or more dates set for prepayment or otherwise, (ii) each payment required to be made by the Borrowers and the other Loan Parties under this Agreement in respect of any Letter of Credit, when and as due, including payments in respect of Reimbursement Obligations, interest thereon and obligations to provide cash collateral, (iii) Extraordinary Expenses and (iv) all other monetary obligations, including fees, costs, expenses and indemnities, whether primary, secondary, direct, contingent, fixed or otherwise (including monetary obligations incurred during the pendency of any Insolvency Proceeding, regardless of whether allowed or allowable in such proceeding), of the Borrowers and the other Loan Parties under this Agreement and the other Loan Documents or otherwise stated to constitute “Obligations” hereunder or thereunder, and (b) the due and punctual performance of all covenants, agreements, obligations and liabilities of the Borrowers and the other Loan Parties under or pursuant to this Agreement and the other Loan Documents; provided that, anything to the contrary contained in the foregoing notwithstanding, the Obligations shall exclude Excluded Swap Obligations.

“**OFAC**” shall have the meaning assigned to such term in Section 3.22.

“**Officer’s Certificate**” shall mean a certificate executed by a Responsible Officer in his or her official (and not individual) capacity.

“**Organizational Documents**” shall mean, with respect to any person, (i) in the case of any corporation, the certificate of incorporation and by-laws (or equivalent or comparable constitutional documents with respect to any non-U.S. jurisdiction) of such person, (ii) in the case of any limited liability company, the certificate of formation and operating agreement (or similar documents) of such person, (iii) in the case of any limited partnership, the certificate of formation and limited partnership agreement (or similar documents) of such person, (iv) in the case of any general partnership, the partnership agreement (or similar document) of such person and (v) in any other case, the functional equivalent of the foregoing.

“**Original Credit Agreement**” shall mean that certain credit agreement, dated as of December 17, 2010, among Novelis Inc., as parent borrower, Novelis Corporation, as U.S. borrower, the other U.S. borrowers party thereto, Novelis UK Ltd, as U.K. borrower, Novelis AG, as Swiss borrower, AV Metals Inc., the other Loan Parties party thereto, the lenders party thereto, Bank of America, as administrative agent and as collateral agent, and the other parties thereto, as amended, restated, supplemented or modified prior to the Existing Credit Agreement Closing Date.

“**Other Connection Taxes**” shall mean, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Documents).

“**Other Secured Indebtedness**” shall mean any secured Indebtedness not secured by any Collateral and incurred, created, assumed or permitted to exist in reliance of Section 6.01(y); provided that no such Indebtedness shall constitute Other Secured Indebtedness unless at all times it meets the following requirements: (i) the terms of such Indebtedness do not require any amortization, mandatory prepayment or redemption or repurchase at the option of the holder thereof (other than customary asset sale or change of control provisions, which asset sale provisions may require the application of proceeds of asset sales and casualty events in respect of property not constituting Collateral or property of any Loan Party) that are direct obligations of any Loan Party earlier than the earlier of the Maturity Date and the final maturity date of such Indebtedness, (ii) such Indebtedness has terms and conditions (excluding pricing and premiums) that (A) with respect to Loan Parties, when taken as a whole, are not materially more restrictive or less favorable to the Companies and the Lenders than the terms of the Term Loan Documents (or, if the Term

Loan Documents are no longer in effect, than the Term Loan Documents as in effect immediately prior to their termination) (except with respect to terms and conditions that are applicable only after the Maturity Date) (it being understood that a guaranty by a Loan Party of Indebtedness of a Restricted Subsidiary that is not a Loan Party, which Indebtedness has terms restricting such non-Loan Party Subsidiary that are otherwise permitted under clause (ii)(B) and Section 6.12, would not contravene this clause (ii)(A), unless such guaranty contains terms or conditions with respect to such Loan Party that would, of themselves, violate this clause (ii)(A)) and (B) otherwise are, in the good faith judgment of the Borrowers, on customary market terms for Indebtedness of such type and the Borrowers have determined in good faith that such terms would not reasonably be expected to impair in any material respect the ability of the Loan Parties to meet their obligations under the Loan Documents, (iii) the Liens securing such Indebtedness shall not attach to any Collateral or other property of any Loan Party and (iv) after giving effect to the incurrence of such Indebtedness and to the consummation of any Permitted Acquisition or other Investment or application of funds made with the proceeds of such incurrence on a Pro Forma Basis (Leverage), the Senior Secured Net Leverage Ratio at such date shall not be greater than 3.25 to 1.0 (provided that in calculating the Senior Secured Net Leverage Ratio, the proceeds of the incurrence of such Indebtedness shall be excluded from Unrestricted Cash).

“**Other Taxes**” shall mean all present or future stamp, recording, documentary, excise, transfer, sales, property or similar taxes, charges or levies arising from any payment made hereunder or under any other Loan Document or from the execution, delivery or enforcement of, or otherwise with respect to, this Agreement or any other Loan Document.

“**Overadvance**” shall have the meaning assigned to such term in Section 2.01(e).

~~“**Parent Borrower**” shall have the meaning assigned to such term in the preamble hereto.~~

“**Parent Borrower Obligations**” shall mean all Obligations owing to the Administrative Agent, the Collateral Agent, any Issuing Bank or any Lender by the ~~Parent Borrower~~ Designated Company.

“**Pari Passu Loan Documents**” shall mean “Pari Passu Loan Documents” as defined in the Intercreditor Agreement.

“**Pari Passu Priority Collateral**” shall have the meaning provided in the Intercreditor Agreement.

“**Pari Passu Secured Obligations**” shall mean “Pari Passu Secured Obligations” as defined in the Intercreditor Agreement.

“**Pari Passu Security Documents**” shall mean “Pari Passu Security Documents” as defined in the Intercreditor Agreement.

“**Participant**” shall have the meaning assigned to such term in Section 11.04(b).

“**Participant Register**” shall have the meaning assigned to such term in Section 11.04(d).

“**Participating Member States**” shall mean the member states of the European Communities that adopt or have adopted the euro as their lawful currency in accordance with the legislation of the European Union relating to European Monetary Union.

“**Patriot Act**” shall have the meaning assigned to such term in Section 11.13.

“**PBGC**” shall mean the Pension Benefit Guaranty Corporation referred to and defined in ERISA.

“**Pensions Regulator**” shall mean the body corporate called the Pensions Regulator established under Part I of the Pensions Act 2004.

“**Perfection Certificate**” shall mean, individually and collectively, as the context may require, each certificate of a Loan Party in the form of Exhibit L-1 or any other form approved by the Administrative Agent in its sole discretion, as the same shall be supplemented from time to time by a Perfection Certificate Supplement or otherwise.

“**Perfection Certificate Supplement**” shall mean a certificate supplement in the form of Exhibit L-2 or any other form approved by the Administrative Agent.

“**Permitted Acquisition**” shall mean any Acquisition, if each of the following conditions is met:

(i) no Default is then continuing or would result therefrom;

(ii) no Company shall, in connection with any such transaction, assume or remain liable with respect to any Indebtedness of the related seller or the business, person or properties acquired, except to the extent permitted under Section 6.01, and any other such Indebtedness not permitted to be assumed or otherwise supported by any Company hereunder shall be paid in full or released as to the business, persons or properties being so acquired on or before the consummation of such acquisition;

(iii) the person or business to be acquired shall be, or shall be engaged in, a business of the type that the Loan Parties and the Subsidiaries are permitted to be engaged in under Section 6.15, and the person or business and any property acquired in connection with any such transaction shall be free and clear of any Liens, other than Permitted Liens;

(iv) the Board of Directors of the person to be acquired shall not have indicated publicly its opposition to the consummation of

such acquisition (which opposition has not been publicly withdrawn);

(v) all transactions in connection therewith shall be consummated in all material respects in accordance with Applicable Law;

(vi) with respect to any transaction involving Acquisition Consideration of more than ~~\$50,000,000~~ \$75,000,000, unless the Administrative Agent shall otherwise agree, the Administrative Borrower shall have provided the Administrative Agent written notice on or before the consummation of such transaction, which notice shall describe (A) in reasonable detail the terms and conditions of such transaction and the person or business to be acquired and (B) all such other information and data relating to such transaction or the person or business to be acquired as may be reasonably requested by the Administrative Agent;

(vii) the property acquired in connection with any such Acquisition shall, subject to any Permitted Liens, be made subject to the Lien of the Security Documents, and any person acquired in connection with any such transaction shall become a Guarantor (or a Borrower in the case of a person organized in the United States, or any state thereof or the District of Columbia), in each case, to the extent required under, and within the relevant time periods provided in, Section 5.11;

(viii) with respect to any transaction involving Acquisition Consideration that, when added to the fair market value of Equity Interests, including Equity Interests of Holdings, constituting purchase consideration, exceeds ~~\$50,000,000~~ \$75,000,000, the Administrative Borrower shall have delivered to the Administrative Agent an Officer's Certificate on or prior to the consummation of such transaction certifying that (A) such transaction complies with this definition and (B) such transaction could not reasonably be expected to result in a Material Adverse Effect; and

(ix) either (A) the Availability Conditions are satisfied or (B) the Acquisition Consideration for such acquisition shall not exceed ~~\$50,000,000~~ \$75,000,000, and the aggregate amount of the Acquisition Consideration for all Permitted Acquisitions ~~since the Closing Date consummated during the 12 month period immediately preceding the closing date for such Permitted Acquisition, tested on a rolling basis,~~ made when the Availability Conditions are not satisfied shall not exceed ~~\$100,000,000~~ \$150,000,000.

“Permitted Aleris Foreign Subsidiary Transfer” shall mean, on or after the Aleris Acquisition Closing Date:

(a) the sale, Distribution, contribution or other transfer of the Equity Interests in any Subsidiary of Aleris organized in a jurisdiction outside of the United States of America (each, a “**Transferred Aleris Foreign Subsidiary**”); (x) from a Loan Party to any Loan Party other than Aleris or any Subsidiary of Aleris (and any substantially concurrent interim sale, Distribution, contribution or other transfer of such Equity Interests to a Loan Party (which may include Aleris or any Restricted Subsidiary of Aleris) to effect such sale, Distribution, contribution or transfer) or (y) in the case of Equity Interests in an entity that is not a Loan Party or would not be required to become a Loan Party pursuant to the terms hereof after giving effect to such transfer (and so long as such Person does not own any Equity Interests in any Loan Party), from a Loan Party to any other Company (other than Aleris or any Subsidiary of Aleris) organized in the same jurisdiction as the issuer of such Equity Interests (it being agreed, for this purpose, that Hong Kong and the People's Republic of China are the same jurisdiction so long as an entity organized under the laws of Hong Kong would not be a Subsidiary of an entity organized under the laws of the People's Republic of China after giving effect to such transfer); (and any substantially concurrent interim sale, Distribution, contribution or other transfer of such Equity Interests to a Loan Party (which may include Aleris or any Restricted Subsidiary of Aleris) to effect such sale, Distribution, contribution or transfer); and

(b) if applicable in connection with any of the transactions described in clause (a) above, as consideration for such sale, Distribution, contribution or other transfer of such Equity Interests, the issuance of one or more Intercompany Notes to the Loan Party that sold, Distributed, contributed or otherwise transferred such Equity Interests; provided that:

(i) any such sale, Distribution, contribution or other transfer of such Equity Interests shall occur within one year of the Aleris Acquisition Closing Date (or such later date agreed by the Administrative Agent); provided that any Intercompany Note issued in connection therewith shall be issued substantially concurrently with the consummation of such sale, Distribution, contribution or other transfer of such Equity Interests;

(ii) any such Equity Interests transferred to a Loan Party are, subject to the terms of the Intercreditor Agreement and any limitations on such pledge pursuant to the definition of Excluded Property, or any other limitations set forth in the applicable Security Agreement, pledged in favor of the Collateral Agent to secure the Secured Obligations and, to the extent certificated, the certificates representing such Equity Interests are delivered to the Collateral Agent (or, to the extent required under the Intercreditor Agreement, the Term Loan Collateral Agent), together with undated stock powers or other appropriate instruments of transfer executed and delivered in blank by a duly authorized officer of such Loan Party, no later than the date that is 10 Business Days after the date of such sale, Distribution, contribution or other transfer of such Equity Interests (or such later date agreed by the Administrative Agent);

(iii) the obligations under each Intercompany Note issued in connection with any step of a Permitted Aleris Foreign Subsidiary Transfer shall be subordinated to the Secured Obligations (to the extent evidencing a payment obligation of a Loan Party) on terms reasonably satisfactory to the Administrative Agent and shall constitute Subordinated Indebtedness hereunder, and each such Intercompany Note received by a Loan Party shall, subject to the terms of the Intercreditor Agreement, be pledged in favor of the Collateral Agent to secure the Secured Obligations, and such Intercompany Notes shall be delivered to the Collateral Agent

(or, to the extent required under the Intercreditor Agreement, the Term Loan Collateral Agent), together with an allonge or other instrument of transfer executed and delivered in blank by a duly authorized officer of such Loan Party, no later than the date that is 10 Business Days after the date the Intercompany Note is issued (or such later date agreed by the Administrative Agent); and

(iv) any sale, Distribution, contribution or other transfer of Equity Interests of a Transferred Aleris Foreign Subsidiary to a Restricted Grantor (other than a Transferred Aleris Foreign Subsidiary transferred to a Restricted Grantor organized in the same jurisdiction as the Transferred Aleris Foreign Subsidiary) shall be conditioned on either the creation of a newly formed Unrestricted Grantor or the existence of an Unrestricted Grantor, in each case that (A) is directly 100% owned by such Restricted Grantor and that directly owns 100% of such Transferred Aleris Foreign Subsidiary after giving effect to such transaction, (B) has complied with the Joinder Requirements and (C) shall not be permitted to own, on and after the date of such action, any assets other than the Permitted Holding Company Assets.

“Permitted Amendment” shall have the meaning assigned to such term in Section 11.02(g).

“Permitted Customer Account Financing” shall mean a financing or other transaction of the type permitted by Section 6.01(e) or 6.06(e) with respect to Accounts of one or more Loan

Parties; provided that (i) no Default exists or would result therefrom and the representations and warranties set forth in the Loan Documents shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the date thereof, with the same effect as though made on such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representations and warranties shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date, (ii) Administrative Borrower shall have provided thirty (30) days (or such shorter period as the Administrative Agent may agree in its sole discretion) written notice of such transaction to Administrative Agent, and the purchase agreement or other documentation with respect thereto shall be reasonably satisfactory to the Administrative Agent, (iii) the number of Account Debtors whose Accounts are at any time subject to Permitted Customer Account Financings shall be limited to seven; provided that all Affiliates of an Account Debtor shall be deemed to be a single Account Debtor for purposes of this definition, (iv) the applicable Loan Parties shall have complied with Section 9.01(h) and 9.03(a) with respect to such transaction and, without limitation of the foregoing, Accounts subject to a Permitted Customer Account Financing must be capable of being fully segregated from other Accounts (including with respect to accounts receivable reporting, purchase orders, invoicing, and payments), (v) the applicable Loan Parties shall have entered into such amendments to any applicable Receivables Purchase Agreement as may be requested by, and satisfactory to, the Administrative Agent, to the extent necessary or appropriate in the judgment of the Administrative Agent to reflect such Permitted Customer Account Financing, and (vi) to the extent applicable, each Loan Party shall have delivered opinions of counsel and related officers’ certificates reasonably requested by the Administrative Agent with respect to the continuing “true sale” nature of the transfers of Accounts pursuant to any applicable Receivables Purchase Agreement, after giving effect to any amendment entered into in connection with such Permitted Customer Account Financing, and all such opinions of counsel shall be satisfactory to the Administrative Agent; and provided, further, that notwithstanding any provision of Section 11.02, the Agents are hereby authorized by the Lenders to make any amendments to the Loan Documents that are necessary or appropriate in the judgment of the Administrative Agent to reflect such Permitted Customer Account Financing. In the event that all Accounts of an Account Debtor cease to be subject to a Permitted Customer Account Financing, such Accounts may become Eligible Accounts (subject to the terms and conditions applicable to Accounts generally); provided that the eligibility of such accounts shall be subject to (i) completion of field examinations with regard to the applicable Loan Parties (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document), (ii) such other documentation as Administrative Agent may reasonably request, including legal opinions and certificates, and (iii) such other conditions precedent and eligibility criteria as may be established by the Administrative Agent in its sole discretion, which may include any item referred to in clauses (y) and (z) of Section 11.02(h).

“Permitted Discretion” shall mean Administrative Agent’s commercially reasonable credit judgment exercised in good faith in accordance with customary business practices for asset based lending facilities, based upon its consideration of any factor that it believes (a) could adversely affect the quantity, quality, mix or value of Collateral (including any Applicable Law that may inhibit collection of an Account), the enforceability or priority of the Liens on the

Collateral for the benefit of the Secured Parties, or the amount that the Secured Parties could receive in liquidation of any Collateral; (b) suggests that any collateral report or financial information delivered by any Loan Party is incomplete, inaccurate or misleading in any material respect; (c) materially increases the likelihood of any Insolvency Proceeding involving a Loan Party; or (d) creates or could result in a Default or Event of Default. In exercising such judgment, Administrative Agent may consider any factors that could increase the credit risk of lending to Borrowers on the security of the Collateral.

“Permitted Factoring Facility” shall mean a sale of Receivables on a discounted basis by any Company that is not organized under the laws of, and does not conduct business in, a Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing and any Permitted Novelis Switzerland Financing), so long as (i) no Loan Party has any obligation, contingent or otherwise in connection with such sale (other than to deliver the Receivables purported to be sold free and clear of any encumbrance and other than as permitted by Section 6.04(u)), and (ii) such sale is for cash and fair market value.

“Permitted First Priority Refinancing Debt” shall mean any secured Indebtedness incurred by the ~~Parent~~ Canadian Borrower or Novelis Corporation in the form of one or more series of senior secured notes under one or more indentures or one or more Term Loans; provided that (i) such Indebtedness is secured by the Collateral (or a portion thereof) on a pari passu basis (but without regard to the control of remedies) with the

Pari Passu Secured Obligations and is not secured by any property or assets other than the Collateral, and to the extent such Liens attach to Revolving Credit Priority Collateral, such Liens on Revolving Credit Priority Collateral shall be junior to the Liens securing the Secured Obligations, (ii) such Indebtedness constitutes Term Loan Credit Agreement Refinancing Indebtedness in respect of Term Loans (including portions of classes of Term Loans, Other Term Loans or Incremental Term Loans), (iii) such Indebtedness does not have scheduled amortization or payments of principal and is not subject to mandatory redemption or prepayment (except customary asset sale or change of control provisions, which asset sale provisions may require the application of proceeds of asset sales and casualty events co-extensive with those set forth in the Term Loan Credit Agreement, to make mandatory prepayments or prepayment offers out of such proceeds on a pari passu basis with the Secured Obligations, all other Permitted First Priority Refinancing Debt and all Additional Senior Secured Indebtedness), in each case prior to the earlier of the final maturity date of such Indebtedness and the date that is 181 days after the Maturity Date, (iv) the security agreements relating to such Indebtedness are substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent),

(v) such Indebtedness is not guaranteed by any Persons other than the Loan Parties (including the ~~Parent~~Canadian Borrower if Novelis Corporation is the issuer thereof), (vi) the other terms and conditions of such Indebtedness (excluding pricing, premiums and optional prepayment or optional redemption provisions) are customary market terms for securities of such type (provided that such terms shall in no event include any financial maintenance covenants) and, in any event, when taken as a whole, are not materially more favorable to the investors providing such Indebtedness than the terms and conditions of the applicable Refinanced Debt (except with respect to any terms (including covenants) and conditions contained in such Indebtedness that are applicable only after the Maturity Date) (provided that a certificate of a Responsible Officer of the Administrative Borrower shall have delivered to the Administrative Agent at least five Business Days prior to the incurrence of such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto, stating that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the requirement of this clause (vi) shall be conclusive evidence that such terms and conditions satisfy such requirement unless the Administrative Agent notifies the Administrative Borrower within such five Business Day period that it disagrees with such determination (including a reasonable description of the basis upon which it disagrees)), (vii) no Default shall exist immediately prior to or after giving effect to such incurrence, and (viii) a Senior Representative acting on behalf of the holders of such Indebtedness shall be or have become party to the Intercreditor Agreement and the Liens securing such Indebtedness shall be subject to the Intercreditor Agreement. Permitted First Priority Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

“Permitted Fiscal Unity Liability” shall mean any joint and several liability arising as a result of an Loan Party being a member of a fiscal unity permitted under Section 3.31.

“Permitted German Alternative Financing” shall mean a financing or other transaction of the type permitted by Section 6.01(e), 6.01(m), 6.06(e), or 6.06(r) with respect to Accounts or Inventory of one or more German Loan Parties; provided that (i) no Default exists or would result therefrom and the representations and warranties set forth in the Loan Documents shall be true and correct in all material respects on and as of the date thereof, with the same effect as though made on such date, except to the extent such representations and warranties expressly relate to an earlier date, ~~in which case such representations and warranties shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date,~~ (ii) Administrative Borrower shall have provided thirty (30) days (or such shorter period as the Administrative Agent may agree in its sole discretion) written notice of such transaction to Administrative Agent, (iii) for each German Borrower and each Swiss Borrower, from and after the date of any Permitted German Alternative Financing applicable to such German Borrower, the amount of ~~the~~such German Borrower’s German Borrowing Base shall be deemed to be zero, and availability under ~~the~~each Swiss Borrowing Base in respect of Accounts sold by such German Borrower pursuant to a ~~German~~ Receivables Purchase Agreement shall be deemed to be zero, (iv) on or prior to the date of any Permitted German Alternative Financing, ~~the~~such German Borrower shall have prepaid all of its outstanding Loans in full in cash, in accordance with the terms hereof, (v) from and after the date of any Permitted German Alternative Financing, ~~the~~such German Borrower shall not be permitted to request or borrow any Loans of any Class hereunder, and shall be deemed no longer to be a Borrower hereunder (but shall remain for all purposes a German Guarantor), (vi) the applicable Loan Parties shall have complied with Section 9.01(h) and 9.03(a) with respect to such transaction, (vii) the applicable Loan Parties shall have terminated ~~the German~~each Receivables Purchase Agreement to which such German Borrower is a party, in each case to the satisfaction of the Administrative Agent, (viii) each other Guarantor shall have by a confirmation in form and substance reasonably satisfactory to the Administrative Agent, confirmed that its guarantee of the Guaranteed Obligations (including its Guarantee) shall apply to the Loan Documents as amended pursuant to such Permitted German Alternative Financing, and (ix) each Loan Party shall have delivered opinions of counsel and related officers’ certificates reasonably requested by the Administrative Agent, and all such opinions of counsel shall be satisfactory to the Administrative Agent; and provided, further, that notwithstanding any

provision of Section 11.02, the Agents are hereby authorized by the Lenders to make any amendments to the Loan Documents that are necessary or appropriate in the judgment of the Administrative Agent to reflect such Permitted German Alternative Financing.

“Permitted Holding Company Assets” shall mean for any Person (i) Deposit Accounts; provided that the aggregate amount on deposit in such accounts at the end of each day shall not exceed \$1,000,000 (or the equivalent thereof); provided, further, that, so long as no Default is then continuing, the amount on deposit in such accounts may exceed such amount if such deposits are applied to settle an Investment permitted under Section 6.04 within three Business Days of the deposit therein, (ii) Equity Interests in Subsidiaries pledged under Security Documents, (iii) intangible rights required to exist and do business as a holding company, and (iv) rights under contracts and licenses with Holdings and its Subsidiaries permitted hereunder; provided, that Permitted Holding Company Assets shall not include (x) any Intellectual

Property (other than customary inbound licenses to use Intellectual Property of the Companies necessary to operate the business of such Person) or (y) any other contracts or licenses that are material to the business of Holdings and its Subsidiaries, taken as a whole.

“**Permitted Holdings Amalgamation**” shall mean the amalgamation of AV Metals and the ~~Parent~~Canadian Borrower on a single occasion following the Closing Date ; provided that (i) no Default exists or would result therefrom and the representations and warranties set forth in the Loan Documents shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the date of the amalgamation, with the same effect as though made on such date, except to the extent such representations and warranties expressly relate to an earlier date, ~~in which case such representations and warranties shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date.~~ (ii) the person resulting from such amalgamation shall be named Novelis Inc., and shall be a corporation amalgamated under the Canada Business Corporations Act (such resulting person, the “**Successor ~~Parent~~ Canadian Borrower**”), and the Successor ~~Parent~~Canadian Borrower shall expressly confirm its obligations as the ~~Parent~~Canadian Borrower under this Agreement and the other Loan Documents to which the ~~Parent~~Canadian Borrower is a party pursuant to a confirmation in form and substance reasonably satisfactory to the Administrative Agent, (iii) immediately upon consummation of such amalgamation, (x) if such amalgamation occurs prior to the Designated Holdco Effective Date, AV Minerals, or (y) if such amalgamation occurs prior to the Designated Holdco Effective Date and prior to the commencement of the Permitted Reorganization, a new holding company (“**Successor Holdings**”) with no material assets other than the Equity Interests in the Successor ~~Parent~~Canadian Borrower ~~shall become the parent guarantor, and (such Person described in clause (x) or (y), “Successor Holdings”),~~ shall (A) be ~~an entity~~(1) in the case of AV Minerals, organized or existing under the laws of ~~Canada~~the Netherlands, or (2) in the case of any other holding company, organized under the laws of the Netherlands, England and Wales, Canada, or a province ~~thereof~~territory of Canada, (B) directly own 100% of the Equity Interests in the Successor ~~Parent Borrower~~Canadian Borrower; provided that, if such amalgamation occurs on or after the Designated Holdco Effective Date, then Designated Holdco shall directly own 100% of the Equity Interests in the Successor Canadian Borrower and Successor Holdings shall own 100% of the Equity Interests of Designated Holdco, (C) execute a supplement or joinder to this Agreement in form and substance reasonably satisfactory to the Administrative Agent to become a Guarantor and execute Security Documents (or supplements or joinder agreements thereto) in form and substance reasonably satisfactory to the Administrative Agent, and take all actions necessary or advisable in the opinion of the Administrative Agent or the Collateral Agent to cause the Lien created by the applicable Security Documents to be a duly perfected First Priority Lien in accordance with Applicable Law, including the filing of financing statements (or other applicable filings) in such jurisdictions as may be reasonably requested by the Administrative Agent or the Collateral Agent, and to assume and confirm its obligations as Holdings under this Agreement and the other Loan Documents and (D) subject to the terms of the Intercreditor Agreement, pledge and deliver to the Collateral Agent the certificates, if any, representing all of the Equity Interests ~~of the owned by~~ Successor ~~Parent Borrower~~Holdings, together with undated stock powers or other appropriate instruments of transfer executed and delivered in blank by a duly authorized officer of Successor Holdings, (iv) be in compliance with all covenants and obligations of Holdings (and, on and after the Designated Holdco Effective Date, Designated Holdco) under this Agreement, (v) immediately after giving effect to any such amalgamation, the Consolidated Fixed Charge Coverage Ratio is not less than the Consolidated Fixed Charge Coverage Ratio immediately prior to such amalgamation, such compliance to be determined on the basis of the financial information most recently delivered to the Administrative Agent pursuant to Section 5.01(a) or (b) as though such amalgamation had been consummated as of the first day of the fiscal period covered thereby and evidenced by a certificate from the chief financial officer of the ~~Parent Borrower~~Designated Company demonstrating such compliance calculation in reasonable detail, (vi) the Successor ~~Parent~~Canadian Borrower shall have no Indebtedness after giving effect to the Permitted Holdings Amalgamation other than Indebtedness of the ~~Parent~~Canadian Borrower in existence immediately prior to the ~~date~~consummation of the Permitted Holdings Amalgamation, (vii) each other Guarantor, shall have by a confirmation in form and substance reasonably satisfactory to the Administrative Agent, confirmed that its guarantee of the Guaranteed Obligations (including its Guarantee) shall apply to the Successor ~~Parent~~Canadian Borrower’s obligations under this Agreement, (viii) the ~~Parent~~Canadian Borrower and each other Guarantor shall have by confirmations and any required supplements to the applicable Security Documents reasonably requested by the Administrative Agent, in each case, in form and substance reasonably satisfactory to the Administrative Agent confirmed that its obligations thereunder shall apply to the Successor ~~Parent~~Canadian Borrower’s obligations under this Agreement and the other Loan Documents, and (ix) each Loan Party shall have delivered opinions of counsel and related officers’ certificates reasonably requested by the Administrative Agent with respect to the execution and delivery and enforceability of the documents referred to above and the compliance of such amalgamation with the provisions hereof, and all such opinions of counsel shall be satisfactory to the Administrative Agent; and provided, further, that (x) if the foregoing are satisfied, (1) Successor Holdings will be substituted for and assume all obligations of AV Metals under this Agreement and each of the other Loan Documents and all references hereunder and under the other Loan Documents to Holdings shall be references to such Person and (2) the Successor ~~Parent~~Canadian Borrower shall be substituted for Novelis Inc. under this Agreement and each of the other Loan Documents and shall assume all obligations of Novelis Inc. under this Agreement and each of the other Loan Documents and all references hereunder and under the other Loan Documents to the ~~Parent~~Canadian Borrower shall be references to the Successor ~~Parent~~Canadian Borrower and (y) notwithstanding any provision of Section 11.02, the Agents are hereby authorized by the Lenders to make any amendments to the Loan Documents that are necessary to reflect such changes in the parties to the applicable Loan Documents.

“**Permitted Holdings Indebtedness**” shall mean unsecured Indebtedness of Holdings (i) with respect to which no Borrower or Subsidiary has any Contingent Obligation, (ii) that has no scheduled amortization of principal prior to the earlier of the final maturity date of such Indebtedness and the 180th day following the Maturity Date, (iii) that does not require any payments in cash of interest or other amounts in respect of the principal thereof (other than optional redemption provisions customary for senior discount or “pay-in-kind” notes) for a number of years from the date of issuance or incurrence thereof equal to at least one-half of the term to maturity thereof, (iv) that has mandatory prepayment, repurchase or redemption, covenant, default and remedy provisions customary for senior discount or “pay-in-kind” notes of an issuer that is the parent of a borrower under senior secured credit facilities, and (v) that is issued to a person that is not an Affiliate of the ~~Parent~~BorrowerDesignated Company, or any of its Subsidiaries in an arm’s-length transaction on fair market terms; provided that at least five Business

Days prior to the incurrence of such Indebtedness, a Responsible Officer of Holdings shall have delivered a certificate to the Administrative Agent (together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto) stating that Holdings has determined in good faith that such terms and conditions satisfy the foregoing requirements.

“Permitted Liens” shall have the meaning assigned to such term in Section 6.02.

“Permitted Novelis Switzerland Financing” shall mean, solely to the extent that the Swiss Merger has not occurred, and subject to the last sentence of Section 6.05, a financing or other transaction of the type permitted by Section 6.01(e) or 6.06(e) with respect to any Accounts of Novelis Switzerland; provided that (i) after giving effect to such financing, no Accounts of Novelis Switzerland shall be included in ~~the~~any Borrowing Base, (ii) no Default exists or would result therefrom and the representations and warranties set forth in the Loan Documents shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) on and as of the date thereof, with the same effect as though made on such date, except to the extent such representations and warranties expressly relate to an earlier date, ~~in which case such representations and warranties shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date.~~ (iii) Administrative Borrower shall have provided thirty (30) days (or such shorter period as the Administrative Agent may agree in its sole discretion) written notice of such transaction to Administrative Agent, and the purchase agreement or other documentation with respect thereto shall be reasonably satisfactory to the Administrative Agent, (iv) Novelis Switzerland shall have complied with Section 9.01(h) and 9.03(a) with respect to such transaction, (v) Novelis Switzerland shall have entered into such amendments to ~~the Swiss~~each Receivables Purchase Agreement to which it is a party in its capacity as a Receivables Seller thereunder as may be requested by, and satisfactory to, the Administrative Agent, to the extent necessary or appropriate in the judgment of the Administrative Agent to reflect such Permitted Novelis Switzerland Financing, and (vi) Novelis Switzerland shall have delivered opinions of counsel and related officers’ certificates reasonably requested by the Administrative Agent with respect to the continuing “true sale” nature of the

transfers of Accounts pursuant to any applicable Receivables Purchase Agreement, after giving effect to any amendment entered into in connection with such Permitted Novelis Switzerland Financing, and all such opinions of counsel shall be satisfactory to the Administrative Agent; and provided, further, that notwithstanding any provision of Section 11.02, the Agents are hereby authorized by the Lenders to make any amendments to the Loan Documents that are necessary or appropriate in the judgment of the Administrative Agent to reflect such Permitted Novelis Switzerland Financing. In the event that Accounts of Novelis Switzerland cease to be subject to a Permitted Novelis Switzerland Financing, such Accounts may become Eligible Accounts (subject to the terms and conditions applicable to Accounts generally); provided, however, that such accounts may be subject to such field examinations or other due diligence as the Administrative Agent may require in its Permitted Discretion-prior to the inclusion of any such Accounts in any Borrowing Base (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document).

“Permitted Refinancing” shall mean, with respect to any person, any refinancing or renewal of any Indebtedness of such person; provided that (a) the aggregate principal amount (or accreted value, if applicable) of the Indebtedness incurred pursuant to such refinancing or renewal does not exceed the aggregate principal amount (or accreted value, if applicable) of the Indebtedness so refinanced or renewed except by an amount equal to unpaid accrued interest and premium thereon and any make-whole payments applicable thereto plus other reasonable amounts paid, and fees and expenses reasonably incurred, in connection with such refinancing or renewal and by an amount equal to any existing commitments unutilized thereunder (it being understood that the aggregate principal amount (or accreted value, if applicable) of the Indebtedness being incurred may be in excess of the amount permitted under this clause (a) to the extent such excess does not constitute a Permitted Refinancing and is otherwise permitted under Section 6.01), (b) such refinancing or renewal has a final maturity date equal to or later than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness being refinanced or renewed (excluding the effects of nominal amortization in the amount of no greater than one percent per annum and prepayments of Indebtedness), (c) no Default is then continuing or would result therefrom, (d) the persons that are (or are required to be) obligors under such refinancing or renewal do not include any person that is not an obligor under the Indebtedness being so refinanced or renewed (or, in the case of a Permitted Refinancing of the Senior Notes, such obligors are Loan Parties (other than Holdings)) and (e) the subordination provisions thereof (if any) shall be, in the aggregate, no less favorable to the Lenders than those contained in the Indebtedness being so refinanced or renewed; provided that at least five Business Days prior to the incurrence of such refinancing or renewal, a Responsible Officer of the Administrative Borrower shall have delivered an Officer’s Certificate to the Administrative Agent (together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto) certifying that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements.

“Permitted Reorganization” shall mean, at any time prior to a Qualified Borrower IPO, an internal reorganization of Holdings and its Subsidiaries to effect any or all of the Permitted Reorganization Actions, subject to the following terms and conditions: provided that the Permitted Reorganization shall not occur if the Permitted Holdings Amalgamation occurs and AV Minerals is not Successor Holdings:

(a) both immediately before and immediately after giving effect to each step of the Permitted Reorganization, and at all times during the Permitted Reorganization:

- (i) the Permitted Reorganization, each Permitted Reorganization Action, and each step taken in furtherance of the Permitted Reorganization and of each Permitted Reorganization Action, shall not reduce or impair the value or benefit of the Guarantee, any Foreign Guarantee, or the Collateral; provided that (x) the re-starting of any fraudulent conveyance,

fraudulent transfer, preference or hardening period with respect to any Guarantee, Foreign Guarantee or Lien under Applicable Law and (y) any limitations under the laws of Switzerland with respect to the enforcement of any share pledge with respect to the Equity Interests directly held by Novelis AG, Novelis Switzerland, or the Surviving Swiss Borrower, as applicable, following any sale, Distribution or other transfer described under clause (g) or (h) of the definition of Permitted Reorganization Actions shall not, in itself, constitute a reduction or impairment for purposes of this clause (a);

- (ii) no Default shall have occurred and be continuing or would result therefrom, and each of the representations and warranties made by any Loan Party set forth in ARTICLE III hereof or in any other Loan Document (other than Hedging Agreements) shall be true and correct in all material respects on and as of the date of such step of the Permitted Reorganization with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representations and warranties shall have been true and correct in all material respects as of such earlier date, and a Responsible Officer of the Designated Company (after giving effect to such step of the Permitted Reorganization) shall have provided an Officer's Certificate certifying as to the matters in clause (a)(i) and this clause (a)(ii);
- (iii) no Person involved in any step of the Permitted Reorganization that is not a Loan Party, solely for the period of time that such Person is not a Loan Party, shall hold or own any Collateral or any assets that constituted Collateral immediately prior to or during such step of the Permitted Reorganization;
- (iv) any Collateral shall remain subject to (or, in the case of Collateral created as part of any step of the Permitted Reorganization, shall become subject to, at or prior to the time such step is effected) a duly perfected Lien in favor of the Collateral Agent in accordance with all requirements under Applicable Law, including the filing of financing statements (or other applicable filings) in such jurisdictions as may be reasonably requested by

the Collateral Agent, in each case in accordance with the terms of the Loan Documents (without regard to any time periods provided for herein or therein);

- (v) the Guarantee and each Foreign Guarantee shall continue to be effective and fully enforceable in accordance with its terms, it being understood that a Loan Party shall not be in violation of this clause (v) solely as a result of its amalgamation, consolidation, merger or dissolution with and into another Loan Party so long as such amalgamation, consolidation or merger complies with the requirements of Section 6.05(c); and
- (vi) notwithstanding the foregoing, the Administrative Agent may reasonably require that any Loan Party enter into a new Guarantee, Foreign Guarantee, and new Security Documents, as applicable, or joinders to or reaffirmations of any of the foregoing, in each case in form and substance reasonably satisfactory to the Administrative Agent, in connection with any step of the Permitted Reorganization, in order to reaffirm, preserve or otherwise give effect to the foregoing requirements;

(b) on or prior to the date that the Permitted Reorganization Action described in clause (b) of such definition is consummated, U.K. Holdco shall have executed and delivered such joinder and other documentation reasonably required by the Administrative Agent in order to join this Agreement as a U.K. Borrower and to assume all obligations associated with such role, including all opinions reasonably requested in connection with the foregoing;

(c) the Designated Company shall have provided all notices and certificates required to be delivered, within the time period required to be delivered, to the applicable Agent under the applicable Loan Documents in order to consummate each step of the Permitted Reorganization; provided that, without limiting the notice requirements in this definition, the Administrative Agent may waive in writing in advance any such notice period with respect to such step, and each Lender hereby authorizes the Administrative Agent to waive any such notice period;

(d) the Permitted Reorganization shall be completed no later than the close of business on the one year anniversary of the date that the Companies commence the first step of the Permitted Reorganization (without regard to the formation of Designated Holdco, for so long as Designated Holdco does not own any Equity Interests in any Loan Party or any other Subsidiary) or such longer period as may be agreed to by the Administrative Agent in its sole discretion;

(e) prior to commencing any step of the Permitted Reorganization, each step of the Permitted Reorganization shall be permitted under the documents evidencing Material Indebtedness;

(f) prior to commencing any step of the Permitted Reorganization that requires a Person to become a Borrower or a Guarantor hereunder, such Borrower or Guarantor shall have satisfied the requirements set forth in Section 6(f) of Amendment No. 2 *mutatis mutandis*.

(g) no later than the date that is five Business Days prior to the date that each step of the Permitted Reorganization is commenced (or such later date agreed to by the Administrative Agent), the Designated Company shall have delivered to the Administrative Agent a certificate from a Financial Officer of the Designated Company setting forth the commencement date of such step of the Permitted Reorganization, and certifying that all actions taken in connection with such step comply with the terms of this definition, the definition of Permitted Reorganization Actions, and the terms of the Loan Documents; provided that the first certificate delivered pursuant to this clause (g) shall also state that the step

(or steps) described in such certificate constitute the commencement of the Permitted Reorganization, and shall state the date by which the Permitted Reorganization must be completed in accordance with clause (d) above;

(h) in the case of AV Minerals, Designated Holdco, and each new Subsidiary amalgamated, created or otherwise formed as part of any step of the Permitted Reorganization, such Person shall become a Loan Party (in the case of any Subsidiary of Designated Holdco other than the Borrowers, Novelis Acquisitions and Aleris, solely to the extent required under Section 5.11 or otherwise in order to comply with the other clauses of this definition and the definition of Permitted Reorganization Actions) pursuant to the terms of the Loan Documents (without regard to any time periods provided for herein or therein) and shall become party to and/or execute and deliver the Guarantee, each applicable Foreign Guarantee, each applicable Security Document, this Agreement (if such Person is also required to become a Borrower hereunder), and any other Loan Document or joinder to any of the foregoing, at or prior to the time such step is effected;

(i) [intentionally omitted];

(j) [intentionally omitted];

(k) notwithstanding any other provision in any Loan Document to the contrary, the Loan Parties shall gross-up and otherwise indemnify each Agent and each other Secured Party for all Taxes incurred by such Agent or Secured Party as a result of the Permitted Reorganization or any step thereof (including any such Taxes arising after the consummation of any step of the Permitted Reorganization, whether as a result of a Person becoming Holdings or otherwise), and this Agreement shall be amended as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent (and implemented pursuant to documentation agreed by the Administrative Agent, the Collateral Agent and the Designated Company, such agreement not to be unreasonably withheld), to give effect to such gross-up and indemnification (including the addition of gross-up and indemnification provisions applicable, in the reasonable opinion of the Administrative Agent, to implement such gross up and indemnity obligations); provided, however, that solely for purposes of this clause (k), "Taxes" shall not include any (i) Taxes imposed on or measured by overall net income (however denominated), franchise Taxes (in lieu of net income taxes), and branch profits Taxes, in each case, (x) imposed as a result of such recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof) or (y) that are Other Connection Taxes, (ii) Taxes attributable to such recipient's failure to comply with Section 2.15(e), and (iii) any U.S. federal withholding Taxes imposed under FATCA;

(l) prior to or concurrently with the consummation of each step of the Permitted Reorganization, the Loan Parties shall deliver or cause to be delivered;

- (i) all documents reasonably requested by the Administrative Agent in connection with the Permitted Reorganization and/or such step thereof, including, but not limited to, documents consistent with those described in Section 4.01 (other than clause (l) thereof), in each case in form and substance reasonably acceptable to the Administrative Agent, including, but not limited to, any amendments to or restatements of the Intercreditor Agreement in order to give effect to such step of the Permitted Reorganization or to conform defined terms in the Intercreditor Agreement to defined terms in, and Secured Obligations under, this Agreement; and
- (ii) favorable written opinions of Torys, LLP (or other nationally recognized U.S. counsel for the Loan Parties) and each local and foreign counsel of the Loan Parties (or, in the case of Loan Documents governed by or entities organized under the laws of the United Arab Emirates or the Dubai International Financial Centre, counsel to the Administrative Agent and the Collateral Agent), in each case reasonably requested by the Administrative Agent, in each applicable jurisdiction and addressed to the Agents and the Lenders, covering such matters relating to the Loan Documents and the Permitted Reorganization and/or such step thereof as the Administrative Agent shall reasonably request, and in each case in form and substance reasonably satisfactory to the Administrative Agent, including, but not limited to, opinions covering:
 - (1) creation or continued validity and perfection of the Guarantees, the Foreign Guarantees, or the Collateral after giving effect to such step of the Permitted Reorganization;
 - (2) enforceability of all Loan Documents, and confirmation or similar opinions as to the validity and enforceability of the Guarantees and the Foreign Guarantees and all Security Documents;
 - (3) validity of debt claims in connection with all Loans, Letters of Credit, and all Guarantees and Foreign Guarantees; and
 - (4) no conflict with organizational documents, Requirements of Law and any documents evidencing Material Indebtedness;

(m) notwithstanding any other provision in any Loan Document to the contrary, the Administrative Agent, the Collateral Agent and the Designated Company may make (and the Administrative Agent and the Collateral Agent are hereby authorized by the Lenders to make) such amendments, restatements and other modifications to the Loan Documents (other than the definition of Permitted Reorganization except to the extent provided for therein) as may be necessary or appropriate, in the reasonable opinion of the Administrative Agent, the Collateral Agent, and the Designated Company, to effect the terms of the Permitted Reorganization, in each case in a manner consistent with the terms and conditions set forth in this definition and in forms mutually agreed by the Agents and the Designated Company;

(n) The Borrowers shall pay or cause the applicable Loan Party to pay all reasonable out-of-pocket expenses incurred by the Administrative Agent, the Collateral Agent, the Arrangers, and their respective Affiliates (including the reasonable fees, charges and disbursements of one primary transaction counsel (plus local counsel in each applicable jurisdiction) in connection with the Permitted Reorganization, and all documents, filings, and any amendment, amendment and restatement, modification or waiver of the provisions hereof or of any other Loan Document (whether or not the Permitted Reorganization shall be consummated); and

(o) Notwithstanding any provision in any Loan Document to the contrary, with respect to each step of the Permitted Reorganization, the Administrative Agent may require amendments and modifications to (i) the Loan Documents (or new Guarantees and Foreign Guarantees) to (x) give effect to any Person becoming a Borrower in connection with such step of the Permitted Reorganization and (y) ensure that the Guarantees and the Foreign Guarantees effectively result in the Secured Obligations of each Borrower being guaranteed by each Guarantor (excluding a guarantee by a Borrower of its own Secured Obligations) upon and after giving effect to such step of the Permitted Reorganization and (ii) the Loan Documents (or new Security Documents) to ensure that the Collateral immediately prior to such step of the Permitted Reorganization which is granted by any Loan Party (and assets required to be pledged as Collateral) effectively secures the Secured Obligations of such Loan Party (or any other Loan Parties) upon and after giving effect to such step of the Permitted Reorganization. Such amendments, modifications and other Loan Documents so required by the Administrative Agent shall, notwithstanding any provision in any Loan Document to the contrary, become effective upon execution and delivery by the Administrative Agent, the Collateral Agent and the applicable Loan Party, and shall not require the approval of any Lenders, and the Loan Parties agree to execute and deliver such amendments, modifications and other Loan Documents as may be reasonably requested by the Administrative Agent.

The Collateral Agent is hereby authorized to file UCC or PPSA financing statements, mortgages, and all other documents, filings and registrations in each applicable jurisdiction as the Collateral Agent (after consultation with its counsel) reasonably determines is advisable in connection with the steps contemplated by the Permitted Reorganization in order to preserve or maintain the Liens securing the Secured Obligations or the perfection or recordation of such Liens, or to create or perfect or record Liens granted by Loan Parties in connection with or following the consummation of each step of the Permitted Reorganization.

“Permitted Reorganization Actions” shall mean any or all of the following, in the case of each such action, subject to the satisfaction of each of the terms and conditions set forth in the definition of Permitted Reorganization:

(a) the formation of U.K. Holdco by AV Minerals;

(b) the designation by the Canadian Borrower in a signed written notice delivered to the Agents of U.K. Holdco as “Designated Holdco” and as a U.K. Borrower, and the concurrent

contribution, sale or other transfer of 100% of the Equity Interests in AV Metals (or, if the Permitted Holdings Amalgamation occurs on or prior to such date, Successor Canadian Borrower) from AV Minerals to Designated Holdco;

(c) the sale, Distribution, contribution or other transfer of no more than 12.5% of the aggregate amount of Voting Stock and other Equity Interests in Novelis Aluminium Holdings Unlimited plus one additional share of such Voting Stock by the Canadian Borrower to AV Minerals (and any substantially concurrent interim sale, Distribution, contribution or other transfer of such Equity Interests to a Loan Party to effect such sale, Distribution, contribution or other transfer) and, if applicable, the substantially concurrent issuance of an Intercompany Note by each Loan Party that acquires such Equity Interests to the Loan Party that sells, Distributes, contributes or otherwise transfers such Equity Interests to it, as consideration for such sale, Distribution, contribution or other transfer;

(d) the Permitted Holdings Amalgamation;

(e) the Swiss Merger;

(f) the sale, Distribution or other transfer of 100% or less of the Equity Interests in Novelis Holdings Inc. from the Canadian Borrower to Designated Holdco;

(g) the sale, Distribution, contribution or other transfer of 100% of the Equity Interests in Novelis Holdings Inc. from Designated Company and/or the Canadian Borrower to Novelis AG, Novelis Switzerland SA, the Surviving Swiss Borrower or, to the extent required by clause (iii) below, New U.S. Holdings (as defined below) (and any substantially concurrent interim sale, Distribution, contribution or other transfer of such Equity Interests to an Unrestricted Grantor to effect such sale, Distribution, contribution or other transfer) and, if applicable, the substantially concurrent issuance of an Intercompany Note by each Loan Party that acquires such Equity Interests to the Loan Party that sells, Distributes, contributes or otherwise transfers such Equity Interests to it, as consideration for such sale, Distribution, contribution or other transfer; and

(h) the sale, Distribution, contribution or other transfer by a Loan Party (such Loan Party, the “Transferring Loan Party”) of 100% of the Equity Interests (other than Equity Interests in Novelis Holdings Inc.) in any Subsidiary of the Designated Company (such subsidiary, the “Transferred Subsidiary”), to an Interim Holding Company (as defined below) that has complied with the requirements of clause (iv) below (and any substantially concurrent interim sale, Distribution, contribution or other transfer of such Equity Interests to a Loan Party to effect such sale,

Distribution, contribution or other transfer) and, if applicable, the substantially concurrent issuance of an Intercompany Note by each Loan Party that acquires such Equity Interests to the Loan Party that sells, Distributes, contributes or otherwise transfers such Equity Interests to it, as consideration for such sale, Distribution, contribution or other transfer, provided that:

- (i) the commencement of any of the actions described
in clauses (b), (c), (f), (g) or (h) above (in the case of clauses (g) and (h) above, solely to the extent that Designated Company is Designated Holdco) shall be conditioned on each of AV Minerals and U.K. Holdco having become Guarantors (and U.K. Holdco becoming a Borrower) and having granted Liens on their assets to secure the Secured Obligations on terms consistent with the terms of the Loan Documents, including, but not limited to, the requirements set forth in clause (l) of the definition of Permitted Reorganization and in Sections 5.11 and 5.12 hereof (without regard to any time periods set forth therein) (collectively, the “Joinder Requirements”);
- (ii) the commencement of any of the actions described
in clauses (c), (f), (g) or (h) above (in the case of clauses (g) and (h) above, solely to the extent that Designated Company is Designated Holdco) shall be conditioned on the completion of the actions described in clauses (a) and (b) above;
- (iii) each sale, Distribution, contribution or other
transfer described in clause (g) above shall be conditioned on either (x) Novelis Holdings Inc. not owning, following such action and thereafter, any assets other than the Equity Interests in its direct Subsidiaries and the Permitted Holding Company Assets or (y) the formation of a new Subsidiary (“New U.S. Holdings”) organized under the laws of any State of the United States or the District of Columbia that is a direct Wholly Owned Subsidiary of Novelis AG, Novelis Switzerland SA, or the Surviving Swiss Borrower, and that (1) directly and wholly owns Novelis Holdings Inc. and (2) indirectly wholly owns Novelis Acquisitions (and, immediately after giving effect to the merger of Novelis Acquisitions with and into Aleris in connection with the Aleris Acquisition, Aleris); provided that this subclause (y) shall be further conditioned on New U.S. Holdings complying with the Joinder Requirements; provided, further, that New U.S. Holdings shall not be permitted to own, on and after the date of such action, any assets other than the Permitted Holding Company Assets;
- (iv) each sale, Distribution, contribution or other
transfer described in clause (h) above shall be conditioned on either the creation of a newly formed Unrestricted Grantor or the existence of an existing Unrestricted Grantor, in each case that has complied with the Joinder Requirements (such Unrestricted Grantor, an “Interim Holding Company”), which Person shall be a direct Wholly Owned Subsidiary of Novelis AG, Novelis Switzerland SA, or the Surviving Swiss Borrower, and that shall directly wholly own the Transferred Subsidiary so sold, Distributed, contributed or transferred pursuant to such transaction; provided that such Unrestricted Grantor shall not be permitted to own, on and after the date of such action, any assets other than the Permitted Holding Company Assets;
- (v) except as provided in clauses (i) through (iv) above,
the actions described in clauses (d), (e), (g), and (h) are not conditioned on the occurrence of any of such other actions or the actions described in clauses (a), (b) or (c);
- (vi) the order of the actions described in clauses (a)
through (h) above may be changed as long as the conditions specified for such action in clauses (i) through (v) above are satisfied; and
- (vii) the obligations under each Intercompany Note
issued in connection with any action or interim action described in clause (g) or (h) above shall be subordinated to the Secured Obligations on terms reasonably satisfactory to the Administrative Agent and shall constitute Subordinated Indebtedness hereunder.

“Permitted Second Priority Refinancing Debt” shall mean secured Indebtedness incurred by the ~~Parent~~Canadian Borrower or Novelis Corporation in the form of one or more series of junior lien secured notes under one or more indentures or junior lien secured loans under one or more other debt instruments or facilities; provided that (i) such Indebtedness is secured by a Junior Lien on the Pari Passu Priority Collateral (or a portion thereof) and is not secured by any property or assets other than the Pari Passu Priority Collateral, (ii) such Indebtedness constitutes Term Loan Credit Agreement Refinancing Indebtedness in respect of Term Loans (including portions of classes of Term Loans, Other Term Loans or Incremental Term Loans), (iii) such Indebtedness does not have scheduled amortization or payments of principal and is not subject to mandatory redemption or prepayment (except customary asset sale or change of control provisions), in each case prior to the earlier of the final maturity date of such Indebtedness and the date that is 181 days after the Maturity Date, (iv) the security agreements relating to such Indebtedness are substantially the same as the Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent), (v) such Indebtedness is not guaranteed by any Persons other than the Guarantors, (vi) the other terms and conditions of such Indebtedness (excluding pricing, premiums and optional prepayment or optional redemption provisions), when taken as a whole, are not materially more favorable to the investors or lenders providing such Indebtedness than the terms and conditions of the applicable Refinanced Debt (except with respect to any terms (including covenants) and conditions contained in such Indebtedness that are applicable only after the Maturity Date) (provided that a certificate of a Responsible Officer of the Administrative Borrower delivered to the Administrative Agent at least five Business Days prior to the incurrence of such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or

drafts of the documentation relating thereto, stating that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the requirement of this clause (vi) shall be conclusive evidence that such terms and conditions satisfy such requirement unless the Administrative Agent notifies the Administrative Borrower within such five Business Day period that it disagrees with such determination (including a reasonable description of the basis upon which it disagrees)), (vii) the security agreements relating to such Indebtedness (together with the Intercreditor Agreement) reflect the Junior Lien nature of the security interests and are otherwise substantially the same as the applicable Security Documents (with such differences as are reasonably satisfactory to the Administrative Agent), (viii) no Default shall exist immediately prior to or after giving effect to such incurrence and (ix) a Senior Representative acting on behalf of the holders of such Indebtedness shall have become party to

the Intercreditor Agreement and the Liens securing such Indebtedness shall be subject to the Intercreditor Agreement. Permitted Second Priority Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

“Permitted Short Term Credit Agreement” shall mean that certain Short Term Credit Agreement, dated as of December 18, 2018, among Novelis Acquisitions, as the initial borrower, from and after the consummation of the Aleris Acquisition, Aleris, as borrower, Novelis Inc., as parent, AV Metals Inc., as holdings, the other guarantors from time to time party thereto, the lenders from time to time party thereto, and Standard Chartered Bank, as administrative agent.

“Permitted Short Term Indebtedness” shall mean the Indebtedness incurred under the Permitted Short Term Credit Agreement by Novelis Acquisitions (and, immediately after giving effect to the merger of Novelis Acquisitions with and into Aleris in connection with the Aleris Acquisition, Aleris) in connection with the Aleris Acquisition, and all Contingent Obligations of the other Loan Parties in respect thereof, provided that (i) the net cash proceeds of such Indebtedness shall be used solely to finance a portion of the Aleris Acquisition, to repay existing Indebtedness of Aleris and its Subsidiaries, and to pay fees, costs and expenses incurred in connection with the Aleris Acquisition, such Indebtedness, and incremental term loans incurred under the Term Loan Credit Agreement, (ii) such Indebtedness is not guaranteed by any Persons other than the Loan Parties, (iii) no Default shall exist immediately prior to or after giving effect to such incurrence, (iv) such Indebtedness (including related guarantees) is not secured, (v) the aggregate principal amount of such Indebtedness does not exceed the lesser of \$1,500,000,000 and the amount funded on the Aleris Acquisition Closing Date, (vi) the terms of such Indebtedness do not provide for any scheduled amortization payments, and (vii) the other terms and conditions of such Indebtedness (excluding pricing, premiums, maturity, and mandatory prepayments) are no more favorable to the lenders providing such Indebtedness than the terms and conditions under the Permitted Short Term Loan Documents as in effect on the Amendment No. 2 Effective Date; provided, further, that the terms of such Indebtedness shall not prohibit Holdings or any of its Restricted Subsidiaries from (x) granting any Liens to secure the Secured Obligations, (y) making any loans, payments, distributions or contributions, or any Asset Sales to any Borrower to the extent that such transactions would be permitted under this Agreement, or (z) paying all or any portion of the Secured Obligations at any time and from time to time.

“Permitted Short Term Loan Documents” shall mean the Permitted Short Term Credit Agreement and the other “Loan Documents” (or words of like import) as defined therein, including all guaranties and the notes issued thereunder.

“Permitted Short Term Refinancing Indebtedness” shall have the meaning assigned to such term in Section 6.11(b).

“Permitted Swiss Non-Qualifying Banks” shall have the meaning assigned to such term in Section 5.15(b).

“Permitted Term Loan Facility Refinancing” shall mean any refinancing or renewal of the Indebtedness incurred under the Term Loan Documents; provided that (a) such refinancing or renewal has a final maturity date equal to or later than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness being so refinanced or renewed (excluding the effects of nominal amortization in the amount of no greater than one percent per annum and prepayments of Indebtedness), (b) no Default is existing or would result therefrom, (c) the collateral securing such refinancing or renewal is not greater than the Collateral and (d) the persons that are (or are required to be) obligors under such refinancing or renewal do not include any person that is not an obligor under the Indebtedness being so refinanced or renewed (unless, in the case of a refinancing of Indebtedness of a Loan Party, such persons are or become obligors under the Loan Documents); provided that at least five Business Days prior to the incurrence of such refinancing or renewal, a Responsible Officer of the Administrative Borrower shall have delivered an Officer’s Certificate to the Administrative Agent (together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto) certifying that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements.

“Permitted Unsecured Refinancing Debt” shall mean unsecured Indebtedness incurred by the ~~Parent~~Canadian Borrower or Novelis Corporation in the form of one or more series of senior unsecured notes or loans under one or more instruments; provided that (i) such Indebtedness constitutes Term Loan Credit Agreement Refinancing Indebtedness in respect of Term Loans (including portions of classes of Term Loans, Other Term Loans or Incremental Term Loans), (ii) such Indebtedness does not have scheduled amortization or payments of principal and is not subject to mandatory redemption or prepayment (except customary asset sale or change of control provisions), in each case prior to the earlier of the final maturity date of such Indebtedness and the date that is 181 days after the Maturity Date, (iii) such Indebtedness is not guaranteed by any Persons other than the Guarantors, (iv) the other terms and conditions of such Indebtedness (excluding pricing, premiums and optional prepayment or optional redemption provisions) are customary market terms for Indebtedness of such type and, when taken as a whole, are not materially more restrictive (provided that such terms shall in no event include any financial maintenance covenants) on the ~~Parent Borrower~~Designated Company, and the Restricted Subsidiaries than the terms and conditions applicable to the Loans (provided that a certificate of a Responsible Officer of the Administrative Borrower delivered to the Administrative Agent at least five Business Days prior to the incurrence of

such Indebtedness, together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto, stating that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the requirement of this clause (iv) shall be conclusive evidence that such terms and conditions satisfy such requirement unless the Administrative Agent notifies the Administrative Borrower within such five Business Day period that it disagrees with such determination (including a reasonable description of the basis upon which it disagrees)) and (v) such Indebtedness (including related guarantees) is not secured. Permitted Unsecured Refinancing Debt will include any Registered Equivalent Notes issued in exchange therefor.

“**person**” or “**Person**” shall mean any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity, including any territory or country.

“**Plan**” shall mean any employee pension benefit plan (other than a Multiemployer Plan) subject to the provisions of Title IV of ERISA or Section 412 of the Code or Section 302 of ERISA which is maintained or contributed to by any Company or its ERISA Affiliate or with respect to which any Company could incur liability (including under Section 4069 of ERISA).

“**Platform**” shall have the meaning assigned to such term in Section 11.01(d).

“**Pledged Distribution**” shall mean, collectively, with respect to each Loan Party, all dividends, cash, options, warrants, rights, instruments, distributions, returns of capital or principal, income, interest, profits and other property, interests (debt or equity) or proceeds, including as a result of a split, revision, reclassification or other like change of the Pledged Securities, from time to time received, receivable or otherwise distributed to such Loan Party in respect of or in exchange for any or all of the Pledged Securities or Pledged Intercompany Notes.

“**Pledged Intercompany Notes**” shall mean, with respect to each Loan Party, all intercompany notes described in Schedule 11 to the Perfection Certificate ~~as of the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date and intercompany notes hereafter acquired by such Loan Party and all certificates, instruments or agreements evidencing such intercompany notes, and all assignments, amendments, restatements, supplements, extensions, renewals, replacements or modifications thereof to the extent permitted pursuant to the terms hereof.

“**Pledged Securities**” shall mean, collectively, with respect to each Loan Party, (i) all issued and outstanding Equity Interests of each issuer set forth on Schedule 10 to the Perfection Certificate ~~as of the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date as being owned by such Loan Party and all options, warrants, rights, agreements and additional Equity Interests of whatever class of any such issuer acquired by such Loan Party (including by issuance), together with all rights, privileges, authority and powers of such Loan Party relating to such Equity Interests in each such issuer or under any Organizational Document of each such issuer, and the certificates, instruments and agreements representing such Equity Interests and any and all interest of such Loan Party in the entries on the books of any financial intermediary pertaining to such Equity Interests, (ii) all Equity Interests of any issuer, which Equity Interests are hereafter acquired by such Loan Party or are owned by a Loan Party as of the Closing Date (including by issuance) and all options, warrants, rights, agreements and additional Equity Interests of whatever class of any such issuer acquired by such Loan Party (including by issuance), together with all rights, privileges, authority and powers of such Loan Party relating to such Equity Interests or under any Organizational Document of any such issuer, and the certificates, instruments and agreements representing such Equity Interests and any and all interest of such Loan Party in the entries on the books of any financial intermediary pertaining to such Equity Interests, from time to time acquired by such Loan Party in any manner, and (iii) all Equity Interests issued in respect of the Equity Interests referred to in clause (i) or (ii) upon any consolidation or merger of any issuer of such Equity Interests, other than to the extent any of the foregoing constitute Excluded Equity Interests.

“**Polish Accounts**” shall mean Accounts with respect to which the Account Debtor either (A) maintains its Chief Executive Office in Poland, or (B) is organized under the laws of Poland or any state, territory, province or subdivision thereof.

“**Post-Increase Revolving Lenders**” shall have the meaning assigned to such term in Section 2.23(d).

“**PPSA**” shall mean the Personal Property Security Act (Ontario) and the regulations promulgated thereunder and other applicable personal property security legislation of the applicable Canadian province or provinces in respect of the Canadian Loan Parties (including the Civil Code of Quebec and the regulations respecting the register of personal and movable real rights promulgated thereunder) as all such legislation now exists or may from time to time hereafter be amended, modified, recodified, supplemented or replaced, together with all rules, regulations and interpretations thereunder or related thereto.

“**Pre-Increase Revolving Lenders**” shall have the meaning assigned to such term in Section 2.23(d).

~~“**Prime Rate**” shall mean the rate of interest announced by Wells Fargo from time to time as its prime rate. Such rate is set by Wells Fargo on the basis of various factors, including its costs and desired return, general economic conditions and other factors, and is used as a reference point for pricing some loans, which may be priced at, above or below such rate. Any change in such prime rate announced by Wells Fargo shall take effect at the opening of business on the day specified in the public announcement of such change.~~

“**Principal Jurisdiction**” shall mean (i) the United States, Belgium, Canada, the Netherlands, the United Kingdom, Switzerland and Germany, (ii) each other country in which a Restricted Subsidiary is organized in respect of which Accounts are included in the Borrowing Base in accordance with Section 11.02(h) and (iii) any state, province or other political subdivision of the foregoing.

“**Principal Loan Party**” shall have the meaning assigned to such term in Section 3.16.

“Priority Payables” shall mean at any time, with respect to the Borrowers and the Borrowing Base Guarantors:

(a) (i) the amount past due and owing by each Borrower or Borrowing Base Guarantor, or the accrued amount for which such Borrower or Borrowing Base Guarantor has an obligation to remit to a Governmental Authority or other Person pursuant to any Applicable Law in respect of (u) pension fund obligations; (v) unemployment insurance; (w) goods and services taxes, sales taxes, employee income taxes and other taxes payable or to be remitted or withheld; (x) workers’ compensation; (y) vacation pay; and (z) other like charges and demands and (ii) the amount of fees which an insolvency administrator in an insolvency proceeding is allowed to collect pursuant to German law, including, without limitation, determination fees and collection fees; in each case with respect to the preceding clauses (i) and (ii), to the extent any Governmental Authority or other Person may claim a security interest, Lien, trust or other claim ranking or capable of ranking in priority to or pari passu with one or more of the First Priority Liens granted in the Security Documents; and

(b) the aggregate amount of the Canadian Pension Plan Reserve and any other liabilities of each Borrower or Borrowing Base Guarantor (i) in respect of which a trust

has been or may be imposed on any Collateral to provide for payment or (ii) which are secured by a security interest, pledge, Lien, charge, right or claim on any Collateral; in each case, pursuant to any Applicable Law and which trust, security interest, pledge, Lien, charge, right or claim ranks or, in the Permitted Discretion of the Administrative Agent, is capable of ranking in priority to or pari passu with one or more of the First Priority Liens granted in the Security Documents (such as Liens, trusts, security interests, pledges, Liens, charges, rights or claims in favor of employees, landlords, warehousemen, carriers, mechanics, materialmen, laborers, or suppliers, or Liens, trusts, security interests, pledges, Liens, charges, rights or claims for ad valorem, excise, sales, or other taxes where given priority under Applicable Law);

in each case net of the aggregate amount of all restricted cash held or set aside for the payment of such obligations.

“Pro Forma Basis” shall mean on a basis in accordance with GAAP and Regulation S-X and otherwise reasonably satisfactory to the Administrative Agent.

“Pro Forma Basis (Leverage)” shall mean (subject to [Section 11.02\(k\)](#)), with respect to compliance with any test or covenant hereunder at any time of determination, that all Specified Transactions and the following transactions in connection therewith (if any) shall be deemed to have occurred as of the first day of the applicable period of measurement in such test or covenant: (a) income statement items (whether positive or negative) attributable to the property or Person subject to such Specified Transaction, (i) in the case of a sale or other disposition of all or substantially all Equity Interests in or assets of any Restricted Subsidiary of the ~~Parent Borrower~~ [Designated Company](#) or any division, business unit, line of business or facility used for operations of the ~~Parent Borrower~~ [Designated Company](#) or any of its Restricted Subsidiaries, shall be excluded, and (ii) in the case of a Permitted Acquisition or Investment described in the definition of “Specified Transaction”, shall be included, (b) any retirement of Indebtedness, and (c) any Indebtedness incurred or assumed by the ~~Parent Borrower~~ [Designated Company](#) or any of its Restricted Subsidiaries in connection therewith.

“Pro Rata Percentage” of (i) any Lender at any time shall mean the percentage of the total Commitments of all Lenders represented by such Lender’s Commitment, and (ii) any Lender with respect to a Class or Sub-Class of Obligations or Commitments (or exposure with respect to Loans or Obligations of a Class or Sub-Class), as applicable, shall mean the percentage of the total Commitments of such Class or Sub-Class, as applicable, of all Lenders represented by such Lender’s Commitment of such Class or Sub-Class; provided that the Pro Rata Percentage of any Lender with respect to any Letter of Credit Commitment or exposure, shall be with respect to U.S. Letters of Credit or European Letters of Credit, or Letters of Credit, determined with respect to the Commitment of such Lender relative to all Lenders.

“Process Agent” shall have the meaning assigned to such term in [Section 11.09\(d\)](#).

“property” shall mean any right, title or interest in or to property or assets of any kind whatsoever, whether real, personal or mixed and whether tangible or intangible and including Equity Interests or other ownership interests of any person and whether now in existence or owned or hereafter entered into or acquired, including all Real Property.

“Property Material Adverse Effect” shall mean, with respect to any Mortgaged Property, as of any date of determination and whether individually or in the aggregate, any event, circumstance, occurrence or condition which has caused or resulted in (or would reasonably be expected to cause or result in) a material adverse effect on (a) the business or operations of any Company as presently conducted at the Mortgaged Property; (b) the value or utility of the Mortgaged Property; or (c) the legality, priority or enforceability of the Lien created by the Mortgage or the rights and remedies of the Mortgagee thereunder.

“Proposed Transaction” shall mean any Dividend, prepayment of Indebtedness, Investment, Acquisition, Asset Sale, or other transaction, payment or other action, in each case where the Loan Parties would be required to meet the Availability Conditions in order to be permitted to consummate such transaction, make such payment or take such other action.

“Protective Advances” shall have the meaning assigned to such term in [Section 2.01\(f\)](#).

“PTE” shall mean [a prohibited transaction class exemption issued by the U.S. Department of Labor, as any such exemption may be amended from time to time.](#)

“Purchase Money Obligation” shall mean, for any person, the obligations of such person in respect of Indebtedness (including Capital Lease Obligations) incurred for the purpose of financing all or any part of the purchase price of any property (including Equity Interests of any person) or the cost of installation, construction or improvement of any property and any refinancing thereof; provided, however, that (i) such Indebtedness is incurred within one year after such acquisition, installation, construction or improvement of such property by such person and (ii) the amount of such Indebtedness does not exceed 100% of the cost of such acquisition, installation, construction or improvement, as the case may be.

“Purchased Receivables” shall have the meaning assigned to such term in any Receivables Purchase Agreement.

~~**“Qualified Capital Stock” of any person shall mean any Equity Interests of such person that are not Disqualified Capital Stock.**~~

“Qualified Canadian Borrower IPO” shall mean ~~(i) the issuance by Holdings, or any direct or indirect parent of Holdings which owns no material assets other than its direct or indirect ownership interest in the,~~ at any time prior to the commencement of the first step of the Permitted Reorganization, and so long as the Canadian Borrower (directly or indirectly) owns 100% of the Equity Interests of the Parent Novelis Acquisitions (and, immediately after giving effect to the merger of Novelis Acquisitions with and into Aleris in connection with the Aleris Acquisition, Aleris), the issuance by the Canadian Borrower, of its common Equity Interests in an underwritten primary or secondary public offering (other than a public offering pursuant to a registration statement on Form S-8) pursuant to an effective registration statement filed with the U.S. Securities and Exchange Commission in accordance with the Securities Act ~~or (ii) a Qualified Parent Borrower IPO.~~

“Qualified Capital Stock” of any person shall mean any Equity Interests of such person that are not Disqualified Capital Stock.

“Qualified Cash” shall mean the Dollar Equivalent amount of unrestricted cash of the Borrowers maintained in any Qualified Cash Account.

“Qualified Cash Account” shall mean any of (i) the securities account of Novelis Corporation maintained at J.P. Morgan Securities LLC with account number 752-80404, (ii) the concentration account of Novelis Corporation maintained at Deutsche Bank Trust Company Americas New York with account number 00-472-120, (iii) each replacement account of any account specified in clause (i) or clause (ii) above approved by the Administrative Agent or (iv) any segregated qualified deposit account maintained by a Borrower for the purpose of receiving and maintaining deposits of Qualified Cash, in the case of clauses (i) through (iv), that (A) is located in the jurisdiction of organization of the Borrower that owns such account, any state of the United States or the District of Columbia, (B) is held at a depository bank or securities intermediary that is the Collateral Agent, any Arranger, any of their respective Affiliates, or any other financial institution with the prior written consent of the Administrative Agent (such consent not to be unreasonably withheld or delayed), and (C) is at all times subject to a deposit account control agreement or securities account control agreement (or non-U.S. equivalent thereof) in favor of the Collateral Agent in form and substance reasonably satisfactory to the Collateral Agent, is free and clear of any pledge, security interest, Lien, claim or other encumbrance (other than in favor of (x) the Collateral Agent and, (y) on a junior priority basis, the applicable agent under the Term Loan Credit Agreement (or any Permitted Term Loan Facility Refinancing in respect thereof), the applicable agent or trustee under any Additional Senior Secured Indebtedness, the applicable agent or trustee in respect of any Junior Secured Indebtedness, and customary encumbrances in favor of the applicable depository bank or securities intermediary), and which Qualified Cash is available for use by such Borrower without condition or restriction (except as set forth in such deposit account or securities account control agreement).

“Qualified ~~Parent Borrower~~ IPO” shall mean (i) the issuance by ~~the Parent Borrower~~ Holdings (or, on and after the Designated Holdco Effective Date, Designated Holdco), or any direct or indirect parent of Holdings (or, on and after the Designated Holdco Effective Date, Designated Holdco) which, in the case of Holdings, owns no material assets other than its direct or indirect ownership interest in the Equity Interests of the Canadian Borrower (or, on and after the Designated Holdco Effective Date, Designated Holdco and, to the extent permitted by Section 6.15(a)(i)(y), Novelis Aluminium Holdings Unlimited) and the other assets permitted by Section 6.15, of its common Equity Interests in an underwritten primary or secondary public offering (other than a public offering pursuant to a registration statement on Form S-8) pursuant to an effective registration statement filed with the U.S. Securities and Exchange Commission in accordance with the Securities Act; provided that Designated Holdco shall not consummate a Qualified IPO during any period that AV Minerals owns any Equity Interests in Novelis Aluminium Holdings Unlimited, Novelis Deutschland GmbH, or in any other Subsidiary of AV Minerals other than Designated Holdco, or (ii) a Qualified Canadian Borrower IPO.

“Qualified Securitization Transaction” shall mean any transaction or series of transactions that may be entered into by any Restricted Subsidiary (other than a Restricted Subsidiary organized under the laws of a Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing or any Permitted Novelis Switzerland Financing)) pursuant to which such Restricted Subsidiary may sell, convey or otherwise transfer to a Securitization Entity or may grant a security interest in any Receivables (whether now existing or arising or acquired in the future) of such Restricted Subsidiary or any Related Security or Securitization Assets; provided that no Receivables or other property of any Company organized in a Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing and any Permitted Novelis Switzerland Financing) shall be subject to a Qualified Securitization Transaction.

“Real Property” shall mean, collectively, all right, title and interest (including any freehold, leasehold, minerals or other estate) in and to any and all parcels of or interests in real property owned, leased or operated by any person, whether by lease, license or other means, together with, in each case, all easements, hereditaments and appurtenances relating thereto, all improvements and appurtenant fixtures, all general intangibles and contract rights and other property and rights incidental to the ownership, lease or operation thereof.

“**Receivable**” shall mean the indebtedness and other obligations owed to any Company (other than any Company organized under the laws of a Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing or any Permitted Novelis Switzerland Financing)) (at the time such indebtedness and other obligations arise, and before giving effect to any transfer or conveyance contemplated under any Qualified Securitization Transaction documentation) arising in connection with the sale of goods or the rendering of services by such person, including any indebtedness, obligation or interest constituting an Account, contract right, payment intangible, promissory note, chattel paper, instrument, document, investment property, financial asset or general intangible, in each case, arising in connection with the sale of goods or the rendering of services by such person, and further includes, the obligation to pay any finance charges with respect thereto.

“**Receivables Purchase Agreement**” shall mean each of (a) the Non-Recourse Receivables Purchase Agreement, dated July 6, 2007 (as amended and restated on December 17, 2010), and any related servicing agreements (collectively, the “**Initial German Receivables Purchase Agreement**”) between ~~the German Seller~~ Novelis Deutschland, in its capacities as seller and collection agent, on the one hand, and Novelis AG, on the other hand, in each case with such modifications or amendments as may be reasonably satisfactory to the Administrative Agent in each case providing, inter alia, for the sale and transfer of Accounts by ~~the German Seller~~ Novelis Deutschland to Novelis AG, and (b) ~~the Non-Recourse Receivables Purchase Agreement, dated August 31, 2012, between Novelis Switzerland, as seller, and Novelis AG, as purchaser, and any related servicing agreements, and each other Swiss receivables purchase agreement and related servicing agreements, between one or more Swiss Sellers, as sellers, and Novelis AG, as purchaser, in such form as may be acceptable to the parties thereto and the Administrative Agent (individually and collectively, as the context may require, the “Swiss Receivables Purchase Agreement”), in each case with such modifications or amendments as may be reasonably satisfactory to the Administrative Agent in each case providing, inter alia, for the sale and transfer of Accounts to Novelis AG and~~ (c) any other receivables purchase

agreement and related servicing agreements entered into after the ~~Closing~~ Amendment No. 2 Effective Date pursuant to Section 11.02(h) between a Receivables Seller and a Borrower or Borrowing Base Guarantor, in order that the ~~receivables~~ Accounts subject thereto may be included in ~~the~~ Borrowing Base (or, in the case of a German Borrower or a Swiss Borrower, a Borrowing Base of another German Borrower or Swiss Borrower).

“**Receivables Seller**” shall mean ~~German Seller~~ (i) Novelis Deutschland, in its capacities as seller and collection agent under the Initial German Receivables Purchase Agreement, (ii) each Swiss Seller, and any (iii) each other Restricted Subsidiary that is a seller of Receivables (or, in the case of a German Borrower or a Swiss Borrower selling to another German Borrower or Swiss Borrower, Accounts) to a Borrower pursuant to a Receivables Purchase Agreement (including in its roles as seller and collection agent thereunder).

“**Receiver**” shall mean a receiver or receiver and manager or, where permitted by law, an administrative receiver of the whole or any part of the Collateral, and that term will include any appointee under joint and/or several appointments.

“**Receiver Indemnitees**” shall mean each Receiver and their officers, directors, employees, Affiliates, agents and attorneys.

“**Recipient**” shall mean (a) the Administrative Agent, (b) any Lender, and (c) any Issuing Bank, as applicable.

“**Refinanced Debt**” shall have the meaning assigned to such term in the definition of “Term Loan Credit Agreement Refinancing Indebtedness”.

“**Register**” shall have the meaning assigned to such term in Section 11.04(d).

“**Registered Equivalent Notes**” means, with respect to any notes originally issued in a Rule 144A or other private placement transaction under the Securities Act of 1933, substantially identical notes (having the same guarantees) issued in a Dollar-for-Dollar exchange therefor pursuant to an exchange offer registered with the SEC.

“**Regulation**” shall have the meaning assigned to such term in Section 3.27.

“**Regulation D**” shall mean Regulation D of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

“**Regulation S-X**” shall mean Regulation S-X promulgated under the Securities Act.

“**Regulation T**” shall mean Regulation T of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

“**Regulation U**” shall mean Regulation U of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

“**Regulation X**” shall mean Regulation X of the Board as from time to time in effect and all official rulings and interpretations thereunder or thereof.

“**Reimbursement Date**” shall have the meaning assigned to such term in Section 2.18(b).

“Reimbursement Obligations” shall mean each applicable Borrower’s obligations under Section 2.18 to reimburse LC Disbursements and its obligations to pay fees and other amounts with regard to drawings on Letters of Credit.

“Related Business Assets” shall mean assets (other than cash or Cash Equivalents) used or useful in a Similar Business; provided that any assets received by any Loan Party in exchange for assets transferred by a Loan Party shall not be deemed to be Related Business Assets if they consist of securities of a person, unless upon receipt of the securities of such person, such person would become a Loan Party.

“Related Parties” means, with respect to any Person, such Person's Affiliates and the partners, directors, officers, employees, agents, trustees, administrators, managers, advisors and representatives of such Person and of such Person's Affiliates.

“Related Security” shall mean, with respect to any Receivable, all of the applicable Restricted Subsidiary’s interest in the inventory and goods (including returned or repossessed inventory or goods), if any, the sale of which by the applicable Company gave rise to such Receivable, and all insurance contracts with respect thereto, all other security interests or liens and property subject thereto from time to time, if any, purporting to secure payment of such Receivable, whether pursuant to the contract related to such Receivable or otherwise, together with all financing statements and security agreements describing any collateral securing such Receivable, all guaranties, letters of credit, letter-of-credit rights, supporting obligations, insurance and other agreements or arrangements of whatever character from time to time supporting or securing payment of such Receivable whether pursuant to the contract related to such Receivable or otherwise, all service contracts and other contracts and agreements associated with such Receivable, all records related to such Receivable, and all of the applicable Company’s right, title and interest in, to and under the applicable Qualified Securitization Transaction or Permitted Factoring Facility documentation.

“Release” shall mean any spilling, leaking, seepage, pumping, emitting, emptying, discharging, injecting, escaping, leaching, dumping, disposing, depositing, dispersing, emanating or migrating of any Hazardous Material in, into, onto or through the Environment.

“Relevant Amount” shall have the meaning assigned to such term in Section 2.06(j).

“Relevant Currency Equivalent” shall mean the Dollar Equivalent or each Alternate Currency Equivalent, as applicable.

“Rent Reserve” shall mean a Reserve established by the Administrative Agent in an amount equal to the latest three months rent payments (or the latest three months of payments to a logistics service provider, where applicable) made by any Borrower or Borrowing Base Guarantor for each location at which Inventory of the Borrowers and Borrowing Base Guarantors is located that is not subject to a Landlord Access Agreement or Bailee Letter (as reported to the Administrative Agent by the Administrative Borrower from time to time as requested by the Administrative Agent) (provided that, with respect to Inventory of any German Borrower or ~~any~~ Swiss Loan Party at a leased location, such Reserve may, in the sole discretion of the Administrative Agent, be up to the lesser of (i) eighteen (18) months rent payments and (ii) the amount of rent due during the remaining period of the applicable lease), as such amount may be adjusted from time to time by the Administrative Agent in its Permitted Discretion taking into account any statutory provisions detailing the extent to which landlords, warehousemen or other bailees may make claims against Inventory located thereon.

“Report” shall have the meaning assigned to such term in Section 10.02(c).

“Reporting Recovery Event” shall mean, with respect to any Reporting Trigger Event at any time (a) no Default or Event of Default shall have been outstanding for a period of thirty (30) consecutive days then ended and (b) Excess Availability shall be at least the greater of (i) \$110,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 12.5% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base, for a period of thirty (30) consecutive days then ended.

“Reporting Trigger Event” shall mean as of any Business Day after the Closing Date (a) an Event of Default shall have occurred and is continuing and/or (b) Excess Availability shall as of any date (or, in the case only of Sections 5.07(c), 9.02(f), or 9.03(c), for a period of three (3) consecutive Business Days) be less than the greater of (i) \$110,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$115,000,000) and (ii) 12.5% of the lesser of (A) the Total Revolving Commitment and (B) the then-applicable Total Borrowing Base.

“Required Lenders” shall mean, as of any date of determination, Lenders (subject to Section 2.14(f)) holding more than 50% of the sum of all outstanding Commitments (or after the termination thereof, Total Revolving Exposure).

“Reserves” shall mean reserves established from time to time against the Borrowing Base (in the case of Availability Reserves or other reserves (including, but not limited to, any reserves relating to any fees charged by an insolvency administrator (in the case of such insolvency administrator reserves applicable to Inventory, to the extent not reflected in the Net Recovery Cost Percentage) applicable to such Inventory))) or the Commitments (in the case of Availability Reserves) by the Administrative Agent pursuant to Section 2.01(d) or otherwise in accordance with this Agreement.

“Response” shall mean (a) “response” as such term is defined in CERCLA, 42 U.S.C. § 9601(24), and (b) all other actions required by any Governmental Authority or voluntarily undertaken to (i) clean up, remove, treat, abate or in any other way address any Hazardous Material in the Environment; (ii) prevent the Release or threat of Release, or minimize the further Release, of any Hazardous Material; or (iii) perform studies and investigations in connection with, or as a precondition to, or to determine the necessity of the activities described in, clause (i) or (ii) above.

“Responsible Officer” shall mean, with respect to any Person, any of the principal executive officers, managing members or general partners of such Person but, in any event, with respect to financial matters, the chief financial officer, treasurer or controller of such person. Any document delivered hereunder that is signed by a Responsible Officer of a Loan Party shall be conclusively presumed to have been authorized by

all necessary corporate, partnership and/or other action on the part of such Loan Party and such Responsible Officer shall be conclusively presumed to have acted on behalf of such Loan Party.

“**Restricted Grantor**” shall mean a Loan Party that has granted a Guarantee that is subject to limitations that impair in any material respect the benefit of such Guarantee (as determined by the Administrative Agent in its Permitted Discretion) (it being expressly understood and agreed that (i) except to the extent otherwise provided in any Loan Document, no Loan Party that is ~~a Parent~~the Canadian Borrower, a Canadian Guarantor, a U.K. Borrower, a U.K. Guarantor, a ~~Madeira~~Dubai Guarantor, a ~~Dubai~~Dutch Guarantor or a U.S. Borrower shall be a Restricted Grantor and (ii) except as may be otherwise determined by the Administrative Agent in its Permitted Discretion, each Loan Party that is a Belgian Borrower, a Belgian Guarantor, a German Borrower, a German Guarantor, an Irish Guarantor, a Swiss Borrower, a Swiss Guarantor, a French Guarantor or a Brazilian Guarantor shall be a Restricted Grantor).

“**Restricted Subsidiary**” shall mean, as the context requires, (i) any Subsidiary of Holdings other than an Unrestricted Subsidiary and (ii) any Subsidiary of any Borrower other than an Unrestricted Subsidiary.

“**Restricted Sub-Participation**” shall mean a sub-participation of the rights and/or the obligations of a Lender under this Agreement which is not substantially in the form recommended from time to time by the London Loan Market Association (LMA) (including, in particular, a provision on status of participation substantially in the form set out in Clause 6.1 of the LMA Funded Participation (PAR) form as at the Existing Credit Agreement Closing Date and Clause 7.1 of the current LMA Risk Participation (PAR) form as at the Existing Credit Agreement Closing Date, except for changes that have been approved by the Administrative Agent.

“**Revolving Availability Period**” shall mean the period from and including the Closing Date to but excluding the earlier of (i) the Business Day preceding the Maturity Date and (ii) the date of termination of the Revolving Commitments.

“**Revolving Commitment**” shall mean, with respect to each Lender, subject to Section 2.01(b), the commitment, if any, of such Lender to make Revolving Loans and purchase participations in Letters of Credit hereunder up to the amount set forth on Annex I of Amendment No. 2 with respect to such Lender directly under the column entitled “Revolving Commitment” (and, on and after the Specified Incremental Commitment Availability Date, under the column entitled “Specified Incremental Commitment”) or in an Increase Joinder, or in the Assignment and Assumption pursuant to which such Lender assumed its Revolving Commitment (and/or, prior to the Specified Incremental Commitment Availability Date, such Lender’s Specified Incremental Commitment), as applicable, as the same may be (a) increased pursuant to Section 2.23, (b) reduced from time to time pursuant to Section 2.07 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 11.04. The aggregate amount of the Lenders’ Revolving Commitments on the ~~Closing Date is \$1,200,000,000~~Amendment No. 2 Effective Date (without regard to any Specified Incremental Commitments) is \$1,000,000,000.

“**Revolving Credit Priority Collateral**” shall mean all “Revolving Credit Priority Collateral” as defined in the Intercreditor Agreement.

“**Revolving Exposure**” shall mean, with respect to any Lender at any time, the sum of U.S. Revolving Exposure, Belgian Revolving Exposure, Swiss Revolving Exposure (Total), German Revolving Exposure (Total) and U.K. Revolving Exposure of such Lender.

“**Revolving Lender**” shall mean each Lender which has a Revolving Commitment (without giving effect to any termination of the Total Revolving Commitment if any LC Exposure remains outstanding) or which has any outstanding Revolving Loans (or any then outstanding LC Exposure).

“**Revolving Loan**” shall have the meaning assigned to such term in Section 2.01(a). For the avoidance of doubt, Revolving Loans shall include U.S. Swingline Loans, and Revolving Loans of any Class or Type shall include Overadvances and Protective Advances made as Loans of such Class or Type (other than Overadvances made as European Swingline Loans).

“**Revolving Percentage**” of any Revolving Lender at any time shall be that percentage which is equal to a fraction (expressed as a percentage) the numerator of which is the Revolving Commitment of such Revolving Lender at such time and the denominator of which is the Total Revolving Commitment at such time, provided that if any such determination is to be made after the Total Revolving Commitment (and the related Revolving Commitments of the Lenders) has (or have) terminated, the determination of such percentages shall be made immediately before giving effect to such termination.

“**S&P**” shall mean Standard & Poor’s Rating Services, a division of the McGraw-Hill Companies, Inc. and any successor thereto.

“**Sale and Leaseback Transaction**” shall have the meaning assigned to such term in Section 6.03.

“**Sanctioned Person**” means any Person that is a target of Sanctions, including without limitation, a Person that is: (a) listed on OFAC’s Specially Designated Nationals (SDN) and Blocked Persons List; (b) listed on OFAC’s Consolidated Sanctions List; (c) a legal entity that is deemed by OFAC to be a Sanctions target based on the ownership of such legal entity by Sanctioned Person(s); or (d) a Person that is a Sanctions target pursuant to any territorial or country-based Sanctions program.

“**Sanctions**” or “**Sanction**” means individually and collectively, respectively, any and all economic or financial sanctions, sectoral sanctions, secondary sanctions, trade embargoes and anti-terrorism laws imposed, administered or enforced from time to time by: (a) the United States of America, including those administered by the U.S. Treasury Department Office of Foreign Assets Control (OFAC), the U.S. State Department, the U.S. Department of Commerce, or through any existing or future Executive Order, (b) the United Nations Security Council, (c)

the European Union, (d) the United Kingdom, or (e) any other governmental authorities with jurisdiction over any Credit Party or its Subsidiaries or their respective Related Parties.

“**Sarbanes-Oxley Act**” shall mean the United States Sarbanes-Oxley Act of 2002, as amended, and all rules and regulations promulgated thereunder.

“**Sector 3**” shall mean Sector 3 Appraisals, Inc.

“**Secured Bank Product Obligations**” shall mean Bank Product Debt (other than Excluded Bank Product Debt) owing to a Secured Bank Product Provider, up to the maximum amount specified by such provider in writing to Administrative Agent, which amount may be established or increased (by further written notice to Administrative Agent from time to time) as long as (i) no Default or Event of Default exists (provided that Wells Fargo and its Affiliates shall be permitted to establish or increase such maximum amount without written notice to Administrative Agent), and (ii) immediately after giving effect to the establishment of a Bank Product Reserve for such amount and all other Secured Bank Product Obligations ~~would not result in (i) the Total Revolving Exposure exceeding the Total Borrowing Base then in effect, (ii) the Total Adjusted Revolving Exposure (German) exceeding the Total Adjusted Borrowing Base (German) then in effect, (iii) the Total Adjusted Revolving Exposure (Swiss) exceeding the Total Adjusted Borrowing Base (Swiss) then in effect or (iv) the Total Adjusted Revolving Exposure exceeding the Total Adjusted Borrowing Base then in effect,~~ the Loan Parties are in compliance with the Funding Conditions.

“**Secured Bank Product Provider**” shall mean (a) Wells Fargo or any of its Affiliates; ~~and~~ (b) any Lender or Affiliate of a Lender that is providing a Bank Product (other than an Excluded Bank Product), provided the provider delivers written notice to Administrative Agent, in form and substance satisfactory to Administrative Agent, by the later of the Closing Date (or, in the case of a person who becomes a Lender pursuant to (x) an assignment under Section 11.04(c), (y) Amendment No. 2, or (z) an Increase Joinder, 10 days after such person becomes a Lender) or 10 days following creation of the Bank Product, (i) describing the Bank Product and setting forth the maximum amount to be secured by the Collateral and the methodology to be used in calculating such amount, and (ii) agreeing to be bound by Section 10.12; and (c) on and after the Aleris Acquisition Closing Date, solely to the extent that JPMorgan Chase Bank, N.A. or any of its Affiliates is a Lender, JPMorgan Chase Bank, N.A. or such Affiliate that is providing a Bank Product (other than an Excluded Bank Product), provided that such Person delivers written notice to Administrative Agent, in form and substance satisfactory to Administrative Agent, by the date that is 30 days after the Aleris Acquisition Closing Date satisfying the requirements of clauses (i) and (ii) above.

“**Secured Debt Agreement**” shall mean (i) this Agreement, (ii) the other Loan Documents and (iii) any Bank Product Agreement entered into by a Company with any counterparty that is a Secured Bank Product Provider.

“**Secured Obligations**” shall mean (a) the Obligations and (b) the due and punctual payment and performance of all Secured Bank Product Obligations.

“**Secured Parties**” shall mean, collectively, the Administrative Agent, the Collateral Agent, each co-agent or sub-agent appointed by the Administrative Agent or the Collateral Agent, any Receiver or Delegate, each other Agent, the Lenders, the Issuing Banks, each Secured Bank Product Provider.

“**Securities Act**” shall mean the Securities Act of 1933.

“**Securities Collateral**” shall mean, collectively, the Pledged Securities, the Pledged Intercompany Notes and the Pledged Distributions.

“**Securitization Assets**” shall mean all existing or hereafter acquired or arising (i) Receivables that are sold, assigned or otherwise transferred pursuant to a Qualified Securitization Transaction, (ii) the Related Security with respect to the Receivables referred to in clause (i) above, (iii) the collections and proceeds of the Receivables and Related Security referred to in clauses (i) and (ii) above, (iv) all lockboxes, lockbox accounts, collection accounts or other deposit accounts into which such collections are deposited (and in any event excluding any lockboxes, lockbox accounts, collection accounts or deposit accounts that any Company organized under the laws of any Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing and any Permitted Novelis Switzerland Financing) has an interest in) and which have been specifically identified and consented to by the Administrative Agent, (v) all other rights and payments which relate solely to such Receivables and (vi) all cash reserves comprising credit enhancements for such Qualified Securitization Transaction.

“**Securitization Entity**” shall mean any corporation, company (including any limited liability company), association, partnership, joint venture, trust, mutual fund or other business entity to which any Restricted Subsidiary (excluding any Restricted Subsidiary that is in a Principal Jurisdiction (excluding from such no Principal Jurisdiction requirement any Permitted German Alternative Financing, any Permitted Customer Account Financing and any Permitted Novelis Switzerland Financing)) or any other Securitization Entity transfers Receivables and Related Security) (a) which engages in no activities other than in connection with the financing of Receivables or Related Security, (b) which is designated by the Board of Directors of the ~~Parent Borrower~~Designated Company as a Securitization Entity, (c) no portion of the Indebtedness or any other obligations (contingent or otherwise) of which (i) is guaranteed by the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary (excluding guarantees of such transferor Restricted Subsidiary of obligations (other than the principal of, and interest on, Indebtedness) pursuant to Standard Securitization Undertakings and guarantees by the Securitization Entity), (ii) is recourse to or obligates the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary (other than the Securitization Entity) in any way other than pursuant to Standard Securitization Undertakings or (iii) subjects any property or asset of the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary (other

than the Securitization Entity), directly or indirectly, contingently or otherwise, to the satisfaction thereof, other than pursuant to Standard Securitization Undertakings and other than any interest in the Receivables and Related Security being financed (whether in the form of any equity interest in such assets or subordinated indebtedness payable primarily from such financed assets) retained or acquired by the transferor Restricted Subsidiary, (d) to which none of the ~~Parent Borrower~~Designated Company nor any Restricted Subsidiary has any obligation to maintain or preserve such entity's financial condition or cause such entity to achieve certain levels of operating results and (e) with which none of Holdings, the ~~Parent Borrower~~Designated Company, nor any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company has any material contract, agreement, arrangement or understanding other than those customary for a Qualified Securitization Transaction and, in any event, on terms no less favorable to Holdings, the ~~Parent Borrower~~Designated Company, or such Restricted Subsidiary that those that might be obtained at the time from Persons that are not Affiliates of Holdings, the ~~Parent Borrower~~Designated Company or such Restricted Subsidiary. Any such designation by the Board of Directors shall be evidenced to the Administrative Agent by providing the Administrative Agent with a certified copy of the resolution of the Board of Directors giving effect to such designation and an Officer's Certificate certifying that such designation complied with the foregoing conditions.

"**Security Agreement**" shall mean each U.S. Security Agreement, each Canadian Security Agreement, each U.K. Security Agreement, each Swiss Security Agreement, each German Security Agreement, each Irish Security Agreement, each Brazilian Security Agreement, each ~~Madeira~~Belgian Security Agreement, each Dutch Security Agreement, each French Security Agreement, each Dubai Security Agreement, and each other Security Agreement entered into pursuant to Section 5.11(b), individually and collectively, as the context may require.

"**Security Agreement Collateral**" shall mean all property pledged or granted as Collateral pursuant to any Security Agreement (a) on the Closing Date or (b) thereafter pursuant to Section 5.11.

"**Security Documents**" shall mean each Security Agreement, the Mortgages, any Security Trust Deed, and each other security document, deed of trust, charge or pledge agreement delivered in accordance with applicable local or foreign law to grant a valid, perfected security interest in any property as Collateral for the Secured Obligations, and all UCC or other financing statements or financing change statements, control agreements, bailee notification letters, or instruments of perfection required by this Agreement, any Security Agreement, any Mortgage or any other such security document, charge or pledge agreement to be filed with respect to the security interests in property and fixtures created pursuant to any Security Agreement or any Mortgage and any other document or instrument utilized to pledge or grant or purport to pledge or grant a security interest or lien on any property as Collateral for the Secured Obligations or to perfect, obtain control over or otherwise protect the interest of the Collateral Agent therein.

"**Security Trust Deed**" shall mean any security trust deed to be executed by, among others, the Collateral Agent, the Administrative Agent and any Loan Party granting security over U.K. or Irish assets of any Loan Party.

"**Senior Note Agreements**" shall mean (a) the Indenture, dated as of August 29, 2016, by and among Novelis Corporation, the guarantors from time to time party thereto, and Regions Bank, as trustee, and (b) the Indenture, dated as of September 14, 2016, by and among Novelis Corporation, the guarantors from time to time party thereto, and Regions Bank, as trustee, in each case pursuant to which the applicable Senior Notes were issued.

"**Senior Note Documents**" shall mean the ~~collective reference to the New Senior Note Documents~~Senior Notes, the Senior Note Agreements, the Senior Note Guarantees and all other documents executed and delivered with respect to the Senior Notes or the Senior Note Agreements.

"**Senior Note Guarantees**" shall mean ~~shall mean the collective reference to the New~~the guarantees of the Loan Parties (other than Novelis Corporation) pursuant to the Senior Note ~~Guarantees~~Agreements.

"**Senior Notes**" shall mean ~~shall mean the collective reference to the New Senior Notes~~Novelis Corporation's 6.25% Senior Notes due 2024 and 5.875% Senior Notes due 2026, each issued pursuant to the applicable Senior Note Agreements, and any senior notes issued pursuant to a Permitted Refinancing of the Senior Notes (and any Registered Equivalent Notes).

"**Senior Representative**" means, with respect to any series of Permitted First Priority Refinancing Debt, Permitted Second Priority Refinancing Debt, Additional Senior Secured Indebtedness or Junior Secured Indebtedness, the trustee, administrative agent, collateral agent, security agent or similar agent under the indenture or agreement pursuant to which such Indebtedness is issued, incurred or otherwise obtained, as the case may be, and each of their successors in such capacities.

"**Senior Secured Net Leverage Ratio**" shall mean, with respect to any date of determination (the "**Calculation Date**"), the ratio of (a) Consolidated Total Net Debt as of the Calculation Date (other than any portion of Consolidated Total Net Debt that is unsecured or is secured solely by Liens that are subordinated to the Liens securing the Pari Passu Secured Obligations pursuant to the Intercreditor Agreement) (it being understood that Indebtedness under the Loan Documents which constitutes Consolidated Total Net Debt will be included in the Senior Secured Net Leverage Ratio) to (b) Consolidated EBITDA for the Test Period most recently ended prior to the Calculation Date for which financial information has been delivered to the Administrative Agent and the Lenders pursuant to Section 5.01(a) or (b).

"**Series of Cash Neutral Transactions**" shall mean any series of Investments, incurrences of Indebtedness, Asset Sales in the form of transfers of intercompany promissory notes and Equity Interests or similar instruments and/or Dividends solely among Companies; provided that (i) the amount of cash or Cash Equivalents transferred by any Company (each such Company, an "**Initiating Company**") to another Company in such Series of Cash Neutral Transactions is not greater than the amount of cash or Cash Equivalents received by such Initiating Company in such Series of Cash Neutral Transactions less reasonable transaction expenses and taxes (which cash and Cash Equivalents must be received by such

Initiating Company within three Business Days of the initiation of such Series of Cash Neutral Transactions), (ii) any Collateral (including cash or Cash Equivalents of any Loan Party involved in such Series of Cash Neutral Transactions) shall remain subject to a perfected security interest of the Collateral Agent, and the validity, perfection and priority of such security interest shall not be impaired by or in connection with such Series of Cash Neutral Transactions, (iii) no more than \$50,000,000 in aggregate of cash or Cash Equivalents may be held by Companies that are not Loan Parties in connection with transfers from Loan Parties as part of such Series of Cash Neutral Transactions (and any such Company that is not a Loan Party may not retain any of such cash or Cash Equivalents after giving effect to the Cash Neutral Transactions), (iv) the fair market value of the assets (other than cash or Cash Equivalents) that may be held by Companies that are not Loan Parties in connection with transfers from Loan Parties as part of such Series of Cash Neutral Transactions may not exceed \$50,000,000 in the aggregate and (v) the ownership interests of any Unrestricted Grantor in any of its Subsidiaries may not be reduced as a result thereof.

“**Settlement**” has the meaning assigned to such term in Section 2.17(c).

“**Settlement Date**” has the meaning assigned to such term in Section 2.17(c).

“**Significant Event of Default**” shall mean any Event of Default under Section 8.01(a), (b), (g) or (h).

“**Similar Business**” shall mean any business conducted by the ~~Parent~~ Borrower Designated Company, and the other Loan Parties on the Closing Date as described in the Confidential Information Memorandum (or, in the good faith judgment of the Board of Directors of the ~~Parent-Borrower~~ Designated Company, which is substantially related thereto or is a reasonable extension thereof).

“**SL Scheme**” shall mean the Syndicated Loan relief scheme as described in the HM Revenue & Customs Guidelines dated September 2010 and administered by HM Revenue & Customs’ Centre for Non-Residents.

“**Specified Aleris Hedging Agreements**” shall mean Hedging Agreements with Aleris or any of its Subsidiaries that are required to be secured by a Lien on any assets of Aleris or any of its Subsidiaries, in each case other than solely as a result of the designation of any counterparty thereto as a “Secured Hedge Provider” in accordance with the terms of the Term Loan Credit Agreement.

“**Specified Aleris German Subsidiary**” shall mean, on and after the Aleris Acquisition Closing Date, each Wholly Owned Subsidiary of the Designated Company organized under the laws of Germany that was a Subsidiary of Aleris on the Aleris Acquisition Closing Date, other than a Person that became a German Borrower on the Aleris Acquisition Closing Date.

“**Specified Aleris Subsidiaries**” shall mean, after giving effect to the Aleris Acquisition, each direct or indirect Foreign Subsidiary of Aleris that (a) is a Borrower, is required to become a Borrower on the Amendment No. 2 Effective Date pursuant to Amendment No. 2, or becomes a Borrower pursuant to Section 2.20, or (b) directly or indirectly owns one or more Subsidiaries described in clause (a) above.

“**Specified Aleris U.S. Subsidiary**” shall mean, on and after the Aleris Acquisition Closing Date, each Wholly Owned Subsidiary of the Designated Company organized under the laws of the United States or any state thereof or the District of Columbia that was a Subsidiary of Aleris on the Aleris Acquisition Closing Date, other than a Person that became a U.S. Borrower on the Aleris Acquisition Closing Date.

“**Specified Asset Sale**” shall mean any Asset Sale under Section 6.06 (Asset Sales) by any Company that is not organized in a Principal Jurisdiction to the extent that the book value of the Revolving Priority Collateral subject to such Asset Sale does not exceed 25% of the total consideration for such Asset Sale.

“**Specified Equity Contribution**” shall mean any cash contribution to the common equity of Holdings and/or any purchase or investment in an Equity Interest of Holdings other than Disqualified Capital Stock constituting a “Specified Equity Contribution” pursuant to Section 8.04 of the Term Loan Credit Agreement (or any similar term in any Term Loan Credit Agreement Refinancing Indebtedness).

“**Specified Holders**” shall mean Hindalco and its Affiliates.

“**Specified Incremental Commitments**” shall, subject to Section 2.01(b), have the meaning assigned to such term in Amendment No. 2. The aggregate amount of the Lenders’ Specified Incremental Commitments on the Amendment No. 2 Effective Date is \$500,000,000. The Specified Incremental Commitments shall not reduce the amount available under Section 2.23.

“**Specified Incremental Commitment Availability Date**” shall mean the earlier of (a) the Aleris Acquisition Closing Date and (b) the date that is 6 months after the Amendment No. 2 Effective Date, in the case of this clause (b), so long as the conditions precedent in Section 8 of Amendment No. 2 are satisfied (or waived in accordance with the terms hereof).

“**Specified Transaction**” shall mean, with respect to any period, any Permitted Acquisition (other than Permitted Acquisitions where the amount of the Acquisition Consideration plus the fair market value of any Equity Interests which constitutes all or a portion of the purchase price is less than \$15,000,000), Asset Sales (other than any dispositions in the ordinary course of business and dispositions where the fair market value of the assets disposed of is less than \$15,000,000), Dividend, designation or redesignation of a Subsidiary as a Restricted Subsidiary or an Unrestricted Subsidiary, incurrence or prepayment of Indebtedness (including any transaction under Section 6.11), any Incremental Term Loan or Revolving Credit Commitment increase that by the terms of this Agreement requires compliance on a Pro Forma Basis with a test or covenant hereunder or requires such test or covenant (or a component of such test or covenant) to be calculated on a “Pro Forma Basis” or a “Pro Forma Basis (Leverage)”.

“Spot Selling Rate” shall mean, as determined by the Administrative Agent on any day, the rate offered in the foreign exchange market for the purchase of the applicable currency with Dollars at the end of the preceding day, as such rate is published by Bloomberg for such day or, if no such rate is published by Bloomberg, then as offered through the foreign exchange trading office of the Administrative Agent or another financial institution on such day.

“Standard Factoring Undertakings” shall mean representations, warranties, covenants and indemnities entered into by any Restricted Subsidiary that are negotiated in good faith at arm’s length in a Receivables factoring transaction so long as none of the same constitute Indebtedness, a Contingent Obligation (other than in connection with an obligation to repurchase receivables that do not satisfy related representations and warranties) or otherwise require the provision of credit support in excess of customary credit enhancement established upon entering into such Receivables factoring transaction negotiated in good faith at arm’s length.

“Standard Securitization Undertakings” shall mean representations, warranties, covenants and indemnities entered into by any Restricted Subsidiary that are negotiated in good faith at arm’s length in a Receivables securitization transaction so long as none of the same constitute Indebtedness, a Contingent Obligation (other than in connection with an obligation to repurchase receivables that do not satisfy related representations and warranties) or otherwise require the provision of credit support in excess of customary credit enhancement established upon entering into such Receivables securitization transaction negotiated in good faith at arm’s length.

“Standby Letter of Credit” shall mean any standby letter of credit or similar instrument issued for the purpose of supporting obligations of Holdings or any of its Subsidiaries not prohibited by this Agreement.

“Statutory Reserves” shall mean (a) for any Interest Period for any Eurocurrency Borrowing in Dollars, the average maximum rate at which reserves (including any marginal, supplemental or emergency reserves) are required to be maintained during such Interest Period under Regulation D by member banks of the United States Federal Reserve System in New York City with deposits exceeding \$1,000,000,000 against “Eurocurrency liabilities” (as such term is used in Regulation D), (b) for any Interest Period for any portion of a Borrowing in GBP, the average maximum rate at which reserves (including any marginal, supplemental or emergency reserves), if any, are in effect on such day for funding in GBP maintained by commercial banks which lend in GBP, (c) for any Interest Period for any portion of a European Swingline Borrowing in Swiss francs, the average maximum rate at which reserves (including any marginal, supplemental or emergency reserves), if any, are in effect on such day for funding in Swiss francs maintained by commercial banks which lend in Swiss francs or (d) for any Interest Period for any portion of a Borrowing in euros, the average maximum rate at which reserves (including any marginal, supplemental or emergency reserves), if any, are in effect on such day for funding in euros maintained by commercial banks which lend in euros. Eurocurrency Borrowings and EURIBOR Borrowings shall be deemed to constitute Eurocurrency liabilities and to be subject to such reserve requirements without benefit of or credit for proration, exceptions or offsets which may be available from time to time to any Lender under Regulation D.

“Sub-Class,” when used in reference to any Revolving Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are U.S. Revolving Loans, U.K. Revolving Loans, [Belgian Revolving Loans](#), German Revolving Loans or Swiss Revolving Loans.

“Subordinated Indebtedness” shall mean Indebtedness of a Loan Party that is subordinated by its terms (including pursuant to the terms of any subordination agreement, intercreditor agreement, or otherwise) in right of payment to the Obligations of such Loan Party. **“Subordinated Lien Secured Obligations”** shall mean “Subordinated Lien Secured Obligations” as defined in the Intercreditor Agreement.

“Subsidiary” shall mean, with respect to any person (the **“parent”**) at any date, (i) any corporation, limited liability company, association or other business entity of which securities or other ownership interests representing more than 50% of the voting power of all Equity Interests entitled (without regard to the occurrence of any contingency) to vote in the election of the Board of Directors thereof are, as of such date, owned, controlled or held by the parent and/or one or more subsidiaries of the parent, (ii) any partnership (a) the sole general partner or the managing general partner of which is the parent and/or one or more subsidiaries of the parent or (b) the only general partners of which are the parent and/or one or more subsidiaries of the parent and (iii) any other person that is otherwise Controlled by the parent and/or one or more subsidiaries of the parent. Unless the context requires otherwise, “Subsidiary” refers to a Subsidiary of Holdings. Notwithstanding the foregoing, Logan (A) shall not be treated as a Subsidiary hereunder or under the other Loan Documents unless it qualifies as a Subsidiary under clause (i) of this definition and (B) (i) except as set forth in clause (ii) below, Ulsan JV Subsidiary shall not be treated as a Subsidiary hereunder or under the other Loan Documents at any time that (x) Holdings directly or indirectly owns Equity Interests in Ulsan JV Subsidiary and (y) Holdings or any of its Subsidiaries has the right to elect no more than half of the directors of Ulsan JV Subsidiary and (ii) regardless of whether Ulsan JV Subsidiary is a Subsidiary, the financial results of Ulsan JV Subsidiary shall be included in all consolidated financial results of Novelis Inc. and its Subsidiaries to the extent Novelis Inc. consolidates the results of Ulsan JV Subsidiary in its financial statements in accordance with U.S. GAAP; provided that the proportionate interest of the Ulsan Joint Venture Partner in the Ulsan JV Subsidiary and any liability of the Ulsan JV Subsidiary to pay Distributions to the Ulsan Joint Venture Partner with respect to such proportionate interest shall be excluded for the purposes of all financial definitions under this Agreement.

“Subsidiary Guarantor” shall mean each Restricted Subsidiary listed on [Schedule 1.01\(b\) to Amendment No. 2](#), and each other Restricted Subsidiary that is or becomes a party to this Agreement as a Subsidiary Guarantor pursuant to [Section 5.11](#) or otherwise.

“Successor Holdings” shall have the meaning assigned to such term in the definition of “Permitted Holdings Amalgamation”.

“Successor ~~Parent~~Canadian Borrower” shall have the meaning assigned to such term in the definition of “Permitted Holdings Amalgamation”.

~~“Support Agreement” shall mean the Support Agreement, dated December 17, 2010, among Novelis North America Holdings Inc., Novelis Acquisitions LLC and the Parent Borrower.~~

“Survey” shall mean a survey of any Mortgaged Property (and all improvements thereon) which is (a) (i) prepared by a surveyor or engineer licensed to perform surveys in the jurisdiction where such Mortgaged Property is located, (ii) current as of a date which shows all exterior construction on the site of such Mortgaged Property or any easement, right of way or other interest in the Mortgaged Property has been granted or become effective through operation of

law or otherwise with respect to such Mortgaged Property which, in either case, can be depicted on a survey, unless otherwise acceptable to the Collateral Agent, (iii) certified by the surveyor (in a manner reasonably acceptable to the Administrative Agent) to the Administrative Agent, the Collateral Agent and the Title Company, (iv) complying in all respects with the minimum detail requirements of the American Land Title Association (or the local equivalent) as such requirements are in effect on the date of preparation of such survey and (v) sufficient for the Title Company to remove all standard survey exceptions from the title insurance policy (or commitment) relating to such Mortgaged Property and issue the endorsements of the type required by Section 4.01(o)(iii), or (b) otherwise reasonably acceptable to the Collateral Agent.

“Surviving Aleris Debt” shall mean, to the extent outstanding on the Aleris Acquisition Closing Date after giving effect to the Aleris Acquisition, Indebtedness incurred by one or more Companies organized under the laws of the People’s Republic of China that is not a Loan Party pursuant to the terms of the non-recourse multi-currency secured term loan facilities and the revolving facilities of Aleris Aluminum (Zhenjiang) Co., Ltd., in each case, as in effect on the Aleris Acquisition Closing Date.

“Surviving Swiss Borrower” shall mean on and after the date of the Swiss Merger, the surviving or resulting Person thereof, solely to the extent such Person has complied with the Specified Borrower Merger Requirements.

“Swap Obligation” shall mean, with respect to any Guarantor, any obligation to pay or perform under any agreement, contract or transaction that constitutes a “swap” within the meaning of section 1a(47) of the Commodity Exchange Act.

“Swingline Conditions” shall mean (a) the aggregate principal amount of U.S. Swingline Loans shall not exceed \$70,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$80,000,000), and (b) the aggregate principal amount of European Swingline Loans shall not exceed the European Swingline Commitment.

“Swingline Exposure” shall mean at any time the sum of (a) U.S. Swingline Exposure plus (b) European Swingline Exposure.

“Swingline Lender” shall mean, individually and collectively, as the context may require, the U.S. Swingline Lender and the European Swingline Lender.

“Swingline Loan” shall mean any loan made by a Swingline Lender pursuant to Section 2.17.

~~“Swiss Borrower” shall have the meaning assigned to such term in the preamble hereto.~~

“Swiss Borrowers” shall mean (a) (i) prior to the Swiss Merger, Novelis AG or (ii) thereafter, the Surviving Swiss Borrower, and (b) on and after the Aleris Acquisition Closing Date following the consummation of the Aleris Acquisition, Aleris Switzerland.

“Swiss Borrowing Base” shall mean, for each Swiss Borrower at any time, an amount equal to the sum of the Dollar Equivalent of, without duplication:

(i) the book value of such Swiss Borrower’s Eligible ~~Large~~Swiss Accounts (other than Eligible Small Customer German Accounts), multiplied by the advance rate of 85% (70% in the case of Polish Accounts not meeting the Credit Insurance Requirement), plus

(ii) the book value of such Swiss Borrower’s Eligible Small Customer German Accounts, multiplied by the “Applicable Percentage” (as defined in the Initial German Receivables Purchase Agreement), multiplied by the advance rate of 85% (70% in the case of Polish Accounts not meeting the Credit Insurance Requirement), plus

(iii) the book value of such Swiss Borrower’s Eligible Swiss ~~Subsidiary~~Purchased Accounts, multiplied by an advance rate of up to 85%, to be determined by the Administrative Agent in its sole discretion, plus

(iv) the lesser of (i) the advance rate of 75% of the Cost of such Swiss Borrower’s Eligible Swiss Inventory, or (ii) the advance rate of 80% of the Net Recovery Cost Percentage multiplied by the Cost of such Swiss Borrower’s Eligible Swiss Inventory, minus

(v) any Reserves established from time to time by the Administrative Agent with respect to ~~the~~such Swiss Borrower’s Swiss Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, however, that during the Aleris Deemed Borrowing Base Period, solely to the extent that Aleris Switzerland has satisfied the Aleris Deemed Borrowing Base Collateral Conditions, Aleris Switzerland’s Swiss Borrowing Base shall be equal to the lesser of:

(a) Aleris Switzerland's Deemed Borrowing Base Allocation in effect at such time; and

(b) the sum of the Dollar Equivalent of, without duplication:

(i) 50% of the aggregate gross Accounts of Aleris Switzerland; minus

(ii) any Reserves established from time to time by the Administrative Agent with respect to Aleris Switzerland's Swiss Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, further, that if the Administrative Agent has not received Acceptable Collateral Diligence in respect of Aleris Switzerland on or prior to the date that is 90 days after the Aleris Acquisition Closing Date, then following such date until the date that the Administrative Agent receives Acceptable Collateral Diligence in respect of Aleris Switzerland, Aleris Switzerland's Swiss Borrowing Base shall be deemed to be zero;

provided, however further, that in no event shall the sum of (a) the aggregate amount of the German Borrowing BaseBases for all German Borrowers available in respect of Eligible German Inventory, plus (b) the portionaggregate amount of the Swiss Borrowing BaseBases for all Swiss Borrowers available in respect of Eligible Swiss Inventory, exceed the greater of (A) \$175,000,000 (or, on and after the Aleris Acquisition Closing Date, \$225,000,000) and (B) 20% of the Total Gross Borrowing Base.

~~The~~Each Swiss Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that ~~the~~such Swiss Borrowing Base is calculated in accordance with the terms of this Agreement. Aleris Switzerland's Deemed Borrowing Base Allocation at any time shall be determined by reference to the most recent Borrowing Base Certificate or other certificate theretofore delivered to the Administrative Agent, or in any certificate delivered to the Administrative Agent pursuant to the last paragraph of Section 9.03, with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the Borrowing Base of Aleris Switzerland is calculated in accordance with the terms of this Agreement.

"Swiss francs" or "CHF" shall mean lawful money of Switzerland.

"Swiss Franc Denominated Loan" shall mean each European Swingline Loan denominated in Swiss francs at the time of the incurrence thereof.

"Swiss Guarantor" shall mean each Restricted Subsidiary of ~~Parent Borrower~~the Designated Company, organized in Switzerland (~~other than the Swiss Borrower~~) party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~the Designated Company organized in Switzerland that ~~is required to become~~becomes a Guarantor pursuant to the terms hereof.

"Swiss Loan Party" shall mean ~~the~~a Swiss Borrower or a Swiss Guarantor.

"Swiss Non-Qualifying Bank" shall mean a (Swiss or non-Swiss) Person that does not qualify as a Swiss Qualifying Bank.

"Swiss Qualifying Bank" shall mean a (Swiss or non-Swiss) financial institution which (i) qualifies as a bank pursuant to the banking laws in force in its country of incorporation, (ii) carries on a true banking activity in such jurisdiction as its main purpose, and (iii) has personnel, premises, communication devices and decision-making authority of its own, all as per the guidelines of the Swiss Federal Tax Administration No. S-02.122.1(4.99), No. 34(07.11), S-02123(9.86), No. S-02.128(1.2000) and No. S-02.130.1(4.99) or legislation or guidelines addressing the same issues which are in force at such time.

~~"Swiss Receivables Purchase Agreement" shall have the meaning assigned to such term in the definition of "Receivables Purchase Agreement".~~

"Swiss Revolving Exposure (Individual)" shall mean, for each Swiss Borrower individually, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding Swiss Revolving Loans of such Lender made to such Swiss Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European LC Exposure applicable to European Letters of Credit issued for the account of such Swiss Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such

Lender's European Swingline Exposure applicable each European Swingline Loan made to such Swiss Borrower.

"Swiss Revolving Exposure (Total)" shall mean, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding Swiss Revolving Loans of such Lender made to all Swiss Borrowers taken as a whole, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European LC Exposure applicable to European Letters of Credit issued for the account of any Swiss Borrower, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's European Swingline Exposure applicable to each European Swingline Loan made to a Swiss Borrower.

"Swiss Revolving Loan" shall have the meaning assigned to such term in Section 2.01(a).

“**Swiss Security Agreement**” shall mean, collectively (i) any Security Agreement ~~substantially in the form of Exhibit M-4~~, including all subparts thereto, among ~~the~~any Swiss Loan Parties (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any Swiss Loan Party or any Person who is the holder of Equity Interests in any Swiss Loan Party in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of Switzerland (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

“**Swiss Seller**” shall mean Novelis Switzerland, a company organized under the laws of Switzerland, and any other Subsidiary Guarantor that is a Restricted Grantor organized in Switzerland (including each in its roles as seller and collection agent under a ~~Swiss~~ Receivables Purchase Agreement governed by the laws of Switzerland).

“**Swiss Swingline Exposure**” shall mean at any time the aggregate principal amount at such time of all outstanding Swiss Swingline Loans. The Swiss Swingline Exposure of any Revolving Lender at any time shall equal its Pro Rata Percentage of the aggregate Swiss Swingline Exposure at such time.

“**Swiss Swingline Loan**” shall mean any loan made by the European Swingline Lender to the European Administrative Borrower pursuant to Section 2.17. For the avoidance of doubt, Swiss Swingline Loans shall include Overadvances made as Swiss Swingline Loans.

“**Swiss Withholding Tax**” shall mean any withholding tax in accordance with the Swiss Federal Statute on Anticipatory Tax of 13 October 1965 (*Bundesgesetz über die Verrechnungssteuer*) and any successor provision, as appropriate.

“**Synthetic Lease Obligation**” means the monetary obligation of a Person under a so-called synthetic, off-balance sheet or tax retention lease. It is understood that no lease that would be treated as an operating lease under U.S. GAAP as in effect on the Closing Date shall be treated as a Synthetic Lease Obligation solely due to changes in U.S. GAAP following the Closing Date.

“**TARGET2**” shall mean the Trans-European Automated Real-time Gross Settlement Express Transfer payment system that utilizes a single shared platform and which was launched on November 19, 2007 (or any successor payment system).

“**TARGET Day**” shall mean any day on which TARGET2 is open for the settlement of payments in Euro.

“**Tax Deduction**” has the meaning assigned to such term in Section 2.15(i).

“**Tax Return**” shall mean all returns, statements, filings, attachments and other documents or certifications required to be filed in respect of Taxes.

“**Taxes**” shall mean all present or future taxes, levies, imposts, duties, deductions, withholdings, payroll, social security, employment and unemployment taxes, assessments, fees or other charges imposed by any Taxing Authority, including any interest, additions to tax or penalties applicable thereto. For greater certainty it shall further be specified that Taxes shall also include any federal, cantonal and municipal direct taxes levied at source in Switzerland as per Article 51 § 1 lit. d and Article 94 of the Swiss Federal Direct Tax Act of December 14, 1990 and as per Article 21 § 2 lit. a and Article 35 § lit. e of the Swiss Federal Harmonization Direct Tax Act of December 14, 1990.

“**Taxing Authority**” shall mean any Governmental Authority of any jurisdiction or political subdivision thereof with the authority to impose, assess, and collect Taxes and engage in activities of a similar nature with respect to such Taxing Authority.

“**Ten Non-Bank Regulations**” shall mean the regulations pursuant to the guidelines No. S-02.122.1(4.99), No. S-02.128(1.2000) and No. S-02.130.1(4.99) of the Swiss Federal Tax Administration (or legislation or guidelines addressing the same issues which are in force at such time) pursuant to which the aggregate number of Lenders of ~~the~~ Swiss ~~Borrower~~Borrowers under this Agreement which are not Swiss Qualifying Banks shall not at any time exceed ten.

“**Term Loan Administrative Agent**” shall mean Bank of America, in its capacity as administrative agent under the Term Loan Credit Agreement, and its successors and assigns in such capacity.

“**Term Loan Collateral Agent**” shall mean Bank of America, in its capacity as collateral agent under the Term Loan Credit Agreement, and its successors and assigns in such capacity.

“**Term Loan Credit Agreement**” shall mean (i) that certain credit agreement, dated as of ~~December 17, 2010~~January 10, 2017, among the Loan Parties party thereto, the lenders party thereto, ~~Merrill Lynch, Pierce, Fenner & Smith Incorporated, as lead arranger, and Standard Chartered Bank of America~~, as administrative agent and as collateral agent for the Term Loan Secured Parties, as amended by amendment no. 1 thereto, dated as of September 14, 2017, as further amended by amendment no. 2 thereto, dated as of November 20, 2018, as further amended by the increase joinder amendment thereto, dated as of December 18, 2018, and as further amended, restated, supplemented, increased or modified from time to time (including any increase permitted pursuant to Section 2.23 of the Term Loan Credit Agreement or any similar provision in any Term Loan Credit Agreement Refinancing Indebtedness) to the extent not prohibited by this Agreement or the Intercreditor Agreement and (ii) any other credit agreement, loan agreement, note agreement, promissory note, indenture or other agreement or instrument evidencing or governing the terms of any indebtedness or other financial accommodation that has been incurred to extend (subject to the limitations set forth herein and in the

Intercreditor Agreement) or refinance in whole or in part the indebtedness and other obligations outstanding under the (x) credit agreement referred to in clause (i) or (y) any subsequent Term Loan Credit Agreement, in each case which constitutes a Permitted Term Loan Facility Refinancing with respect to the Term Loans, unless such agreement or instrument expressly provides that it is not intended to be and is not a Term Loan Credit Agreement hereunder. Any reference to the Term Loan Credit Agreement hereunder shall be deemed a reference to any Term Loan Credit Agreement then in existence.

“Term Loan Credit Agreement Refinancing Indebtedness” means (a) Permitted First Priority Refinancing Debt, (b) Permitted Second Priority Refinancing Debt, (c) Permitted Unsecured Refinancing Debt or (d) Indebtedness incurred pursuant to a “Refinancing Amendment” (as defined in the Term Loan Credit Agreement), in each case, issued, incurred or otherwise obtained (including by means of the extension or renewal of existing Indebtedness) in exchange for, or to extend, renew, replace or refinance, in whole or part, existing Term Loans (including any successive Term Loan Credit Agreement Refinancing Indebtedness) (**“Refinanced Debt”**); provided that (i) such extending, renewing or refinancing Indebtedness is in an original aggregate principal amount not greater than the aggregate principal amount of the Refinanced Debt, (ii) such Indebtedness has a later maturity and a Weighted Average Life to Maturity equal to or greater than the Refinanced Debt, and (iii) such Refinanced Debt shall be repaid, defeased or satisfied and discharged, and all accrued interest, fees and premiums (if any) in connection therewith shall be paid, on the date such Term Loan Credit Agreement Refinancing Indebtedness is issued, incurred or obtained.

“Term Loan Documents” shall mean the Term Loan Credit Agreement and the other Loan Documents as defined in the Term Loan Credit Agreement and any corresponding term in any successor Term Loan Credit Agreement permitted hereby, including the mortgages and other security documents, guaranties and the notes issued thereunder.

“Term Loan Incremental Equivalent Indebtedness” shall mean Indebtedness permitted under the Term Loan Credit Agreement in lieu of incremental Term Loans thereunder; provided that (i) the terms of such Indebtedness are governed by agreements other than the Term Loan Documents, and (ii) such Indebtedness would have met the requirements of either the definition of “Permitted First Priority Refinancing Debt”, the definition of “Permitted Second Priority Refinancing Debt”, or the definition of “Permitted Unsecured Refinancing Debt”, if such Indebtedness had been incurred to refinance outstanding Incremental Term Loans (with each reference to “Refinanced Debt” contained (or referred to) in such definitions being deemed to refer to the then outstanding Term Loans).

“Term Loan Obligations” shall mean the Term Loans and the guarantees by the Loan Parties under the Term Loan Documents.

“Term Loan Revolver Cap” shall mean the “Maximum Revolving Credit Facility Amount” (as defined in the Term Loan Credit Agreement from time to time) or, if the Term Loan Credit Agreement is no longer in effect, the maximum aggregate principal amount of Indebtedness under the Loan Documents permitted pursuant to any Permitted Term Loan Facility Refinancing, or the documents governing any Indebtedness permitted under Section 6.01 that was incurred to refinance, or in exchange for, any Term Loans or any Permitted Term Loan Facility Refinancing, in each case whether a fixed figure or as determined pursuant to a formula.

“Term Loans” shall mean, collectively, the “Loans,” “Incremental Term Loans” and the “Other Term Loans”, each as defined in the Term Loan Credit Agreement (or any similar term in any Term Loan Credit Agreement Refinancing Indebtedness).

“Test Period” shall mean, at any time, the four consecutive fiscal quarters of ~~Parent Borrower~~ the Designated Company, then last ended (in each case taken as one accounting period).

“Title Company” shall mean any title insurance company as shall be retained by ~~Borrower~~ the Designated Company and reasonably acceptable to the Administrative Agent.

“Title Policy” shall mean a policy of title insurance (or marked up title insurance commitment having the effect of a policy of title insurance) insuring the Lien of such Mortgage as a valid, perfected mortgage Lien on the Mortgaged Property and fixtures described therein having the priority specified in the Intercreditor Agreement in the amount equal to not less than 115% of the fair market value of such Mortgaged Property and fixtures, which policy (or such marked-up commitment) shall (A) be issued by the Title Company, (B) to the extent necessary, include such reinsurance arrangements (with provisions for direct access, if necessary) as shall be reasonably acceptable to the Collateral Agent, (C) contain a “tie-in” or “cluster” endorsement, if available under Applicable Law (*i.e.*, policies which insure against losses regardless of location or allocated value of the insured property up to a stated maximum coverage amount), (D) have been supplemented by such endorsements (or where such endorsements are not available, opinions of special counsel, architects or other professionals reasonably acceptable to the Collateral Agent) as shall be reasonably requested by the Administrative Agent (including endorsements on matters relating to usury, first loss, last dollar, zoning, contiguity, revolving credit, doing business, non-imputation, public road access, survey, variable rate, environmental lien, subdivision, mortgage recording tax, separate tax lot, revolving credit, and so-called comprehensive coverage over covenants and restrictions), and (E) contain no exceptions to title other than exceptions acceptable to the Collateral Agent, it being acknowledged that Permitted Liens of the type described in Section 6.02(a), 6.02(b), 6.02(d), 6.02(f) (clause (x) only), 6.02(g), and 6.02(k) shall be acceptable.

“Total Adjusted Borrowing Base” shall mean, at any time, the sum of (i) the U.S. Borrowing Base at such time, plus (ii) the Canadian Borrowing Base at such time, plus (iii) the lesser of (A) the U.K. Borrowing Base and (B) 50% of the aggregate Revolving Commitments, minus

(without duplication) (iv) Reserves against the Total Borrowing Base or any component thereof (other than ~~the each German Borrower's~~ German Borrowing Base ~~and the Swiss, each Swiss Borrower's Swiss Borrowing Base, and the Belgian~~ Borrowing Base).

"Total Adjusted Borrowing Base (Belgian)" shall mean, at any time, the sum of (i) the U.S. Borrowing Base at such time, plus (ii) the Canadian Borrowing Base at such time, plus (iii) the lesser of (A)(I) the U.K. Borrowing Base plus (II) each Swiss Borrower's Swiss Borrowing Base plus (III) each German Borrower's German Borrowing Base and (B) 50% of the aggregate Revolving Commitments, minus (without duplication) (iv) Reserves against the Total Borrowing Base or any component thereof (other than the Belgian Borrowing Base).

"Total Adjusted Borrowing Base (German)" shall mean, at any time, the sum of (i) the U.S. Borrowing Base at such time, plus (ii) the Canadian Borrowing Base at such time, plus (iii) the lesser of (A)(I) the U.K. Borrowing Base plus (II) ~~the each~~ Swiss Borrower's Swiss Borrowing Base plus (III) the Belgian Borrowing Base and (B) 50% of the aggregate Revolving Commitments, minus (without duplication) (iv) Reserves against the Total Borrowing Base or any component thereof (other than the German Borrowing Base).

"Total Adjusted Borrowing Base (Swiss)" shall mean, at any time, the sum of (i) the U.S. Borrowing Base at such time, plus (ii) the Canadian Borrowing Base at such time, plus (iii) the lesser of (A)(I) the U.K. Borrowing Base plus (II) ~~the each~~ German Borrower's German Borrowing Base plus (III) the Belgian Borrowing Base and (B) 50% of the aggregate Revolving Commitments, minus (without duplication) (iv) Reserves against the Total Borrowing Base or any component thereof (other than the Swiss Borrowing Base).

"Total Adjusted Revolving Exposure" shall mean, at any time, (i) the Total Revolving Exposure at such time minus (ii) the Aggregate Total German Revolving Exposure at such time minus (iii) the Aggregate Total Swiss Revolving Exposure at such time minus (iv) the Aggregate Belgian Revolving Exposure at such time.

"Total Adjusted Revolving Exposure (Belgian)" shall mean, at any time, the Total Revolving Exposure at such time minus Aggregate Belgian Revolving Exposure.

"Total Adjusted Revolving Exposure (German)" shall mean, at any time, the Total Revolving Exposure at such time minus the Aggregate Total German Revolving Exposure at such time.

"Total Adjusted Revolving Exposure (Swiss)" shall mean, at any time, the Total Revolving Exposure at such time minus the Aggregate Total Swiss Revolving Exposure at such time.

"Total Borrowing Base" shall mean, at any time, the lesser of (i) the sum of (A) the U.S. Borrowing Base at such time, plus (B) the Canadian Borrowing Base at such time, plus (C) the European Borrowing Base at such time, minus (without duplication) (D) Reserves against the Total Borrowing Base or any component thereof, and (ii) the Term Loan Revolver Cap; provided, that if the Aleris Acquisition Closing Date occurs and the Administrative Agent has not received the results of field examinations and appraisals of assets of each Additional Borrower in form and substance satisfactory to the Administrative Agent (collectively,

"Acceptable Collateral Diligence"), (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document), then, with respect to each Additional Borrower, from and after the Acquisition Closing Date until the earlier to occur of (i) the date that the Administrative Agent has received Acceptable Collateral Diligence for such Additional Borrower and (ii) the date that is 90 days after the Acquisition Closing Date (such period for such Additional Borrower, its "Aleris Deemed Borrowing Base Period"), each Aleris Borrower that satisfies the Aleris Deemed Borrowing Base Collateral Conditions applicable to such Aleris Borrower shall be permitted to include its assets to the applicable Borrowing Base for such Aleris Borrower and the Total Borrowing Base, subject to the applicable eligibility criteria, reserves, and the Term Loan Revolver Cap; provided that, during the Aleris Deemed Borrowing Base Period, the portion of the Total Borrowing Base attributable to the assets of such Aleris Borrowers shall be equal to the lesser of:

~~**"Total European Revolving Exposure"** shall mean, at any time, the sum of the Total Swiss Revolving Exposure and Total U.K. Revolving Exposure at such time.~~

~~**"Total German Revolving Exposure"** shall mean, at any time, the sum of the German Revolving Exposure of each of the Lenders at such time.~~

(I) \$400,000,000; and

(II) the sum of (w) 65% of the gross Accounts of the Additional U.S. Borrowers,

(x) 50% of the aggregate gross Accounts of Aleris Switzerland, the Belgian Borrower, and the

Additional German Borrowers, (y) 60% of the net book value of all Eligible Inventory of the Additional U.S. Borrowers, and (z) 25% of the net book value of all Eligible Inventory of the Additional German Borrowers and the Belgian Borrower.

If the Administrative Agent has not received Acceptable Collateral Diligence in respect of any Aleris Borrower on or prior to the date that is 90 days after the Aleris Acquisition Closing Date, then following such date until the date that the Administrative Agent receives Acceptable Collateral Diligence in respect of such Aleris Borrower, each Borrowing Base and the Total Borrowing Base shall exclude the assets of each Aleris Borrower for which Acceptable Collateral Diligence has not been provided.

“**Total Gross Borrowing Base**” shall mean, at any time, the sum of (i) the U.S. Borrowing Base at such time, plus (ii) the Canadian Borrowing Base at such time, plus (iii) ~~the each Swiss Borrower’s~~ Swiss Borrowing Base at such time, plus (iv) the U.K. Borrowing Base at such time, plus (v) ~~the each German Borrower’s~~ German Borrowing Base at such time, plus (vi) the Belgian Borrowing Base.

“**Total Revolving Commitment**” shall mean, at any time, the sum of the Revolving Commitments of each of the Lenders at such time. For the avoidance of doubt, the Specified Incremental Commitments shall not be included in the calculation of Total Revolving Commitment until the Specified Incremental Commitment Availability Date occurs.

~~“Total Revolving Exposure” shall mean, at any time, the sum of the Revolving Exposure of each of the Lenders at such time.~~

~~“Total Swiss Revolving Exposure” shall mean, at any time, the sum of the Swiss Revolving Exposure of each of the Lenders at such time.~~

~~“Total U.K. Revolving Exposure” shall mean, at any time, the sum of the U.K. Revolving Exposure of each of the Lenders at such time.~~

“**Total U.S. Revolving Exposure**” shall mean, at any time, the sum of the ~~U.S.~~ Revolving Exposure of each of the Lenders at such time.

“**Transaction Documents**” shall mean the Loan Documents and any Term Loan Documents executed in connection therewith.

“**Transactions**” shall mean, collectively, the transactions to occur pursuant to or in connection with the Transaction Documents, including (a) the execution and delivery of the Loan Documents and the initial borrowings hereunder, and the amendment and restatement of the Existing Credit Agreement pursuant to the terms hereof and (b) the payment of all fees and expenses to be paid on or prior to the Closing Date and owing in connection with the foregoing.

“**Transferred Guarantor**” shall have the meaning assigned to such term in Section 7.09.

“**Treaty Lender**” shall have the meaning assigned to such term in clause (C) of the definition of “U.K. Qualifying Lender”.

“**Twenty Non-Bank Regulations**” shall mean the regulations pursuant to the guidelines No. S-02.122.1(4.99), No. 34(07.11), No. S-02.128(1.2000) and No. S-02.130.1(4.99) of the Swiss Federal Tax Administration (or legislation or guidelines addressing the same issues which are in force at such time) pursuant to which the aggregate number of persons and legal entities, which are not Swiss Qualifying Banks and to which ~~the each~~ Swiss Borrower directly or indirectly, including, without limitation, through a Restricted Sub-Participation or other subparticipations under any other agreement, owes interest-bearing borrowed money under all interest-bearing instruments including, inter alia, this Agreement, taken together (other than bond issues which are subject to Swiss Withholding Tax), shall not exceed twenty at any time in order to not trigger Swiss Withholding Tax.

“**Type**,” when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted EURIBOR Rate, the Adjusted LIBOR Rate, or the Base Rate (in each case with regard to a Loan of a given currency).

“**UCC**” shall mean the Uniform Commercial Code as in effect from time to time in the State of New York; provided that if perfection or the effect of perfection or non-perfection or the priority of any security interest in any Collateral is governed by the Uniform Commercial Code as in effect in a jurisdiction other than the State of New York, “**UCC**” shall mean the Uniform Commercial Code as in effect from time to time in such other jurisdiction for purposes of the provisions hereof relating to such perfection, effect of perfection or non-perfection or priority.

“**U.K. Borrowers**” shall mean Novelis UK and, on and after the Designated Holdco Effective Date, Designated Holdco.

~~“**U.K. Borrower**~~Novelis UK” shall have the meaning assigned to such term in the preamble hereto.

“**U.K. Borrowing Base**” shall mean at any time an amount equal to the sum of the Dollar Equivalent of, without duplication:

- (i) the book value of Eligible U.K. Accounts multiplied by the advance rate of 85%, plus
- (ii) the lesser of (i) the advance rate of 75% of the Cost of Eligible U.K. Inventory, or
- (ii) the advance rate of 85% of the Net Recovery Cost Percentage multiplied by the Cost of Eligible U.K. Inventory, minus

(iii) any Reserves established from time to time by the Administrative Agent with respect to the U.K. Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided that, notwithstanding anything herein to the contrary, the assets of U.K. Holdco shall not be included in the U.K. Borrowing Base until the Administrative Agent has received the results of field examinations, appraisals and other due diligence in form and substance satisfactory to it (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document).

The U.K. Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the U.K.

Borrowing Base is calculated in accordance with the terms of this Agreement.

“**U.K. Guarantor**” shall mean each Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company incorporated in England and Wales ~~(other than the U.K. Borrower)~~ party hereto as a Guarantor, and each other Restricted Subsidiary of ~~Parent Borrower~~ the Designated Company incorporated in England and Wales that ~~is required to become~~ becomes a Guarantor pursuant to the terms hereof.

“U.K. Holdco” shall mean a newly formed direct Wholly Owned Subsidiary of AV Minerals, organized under the laws of England and Wales, formed in connection with the Permitted Reorganization.

“**U.K. Loan Party**” shall mean each ~~of the~~ U.K. Borrower and each U.K. Guarantor.

“**U.K. Qualifying Lender**” shall mean a Lender which is beneficially entitled to interest payable to that Lender in respect of an advance under this Agreement or any other Loan Document and is:

(A) a lender:

- (i) which is a bank (as defined for the purpose of Section 879 of the United Kingdom Income Tax Act 2007) making an advance under this Agreement or any other Loan Document, or
- (ii) in respect of an advance made under this Agreement or any other Loan Document by a person that was a bank (as defined for the purpose of Section 879 of the United Kingdom Income Tax Act 2007) at the time that that advance was made,

and which is within the charge to United Kingdom corporation tax as respects any payments of interest made in respect of that advance; or

(B) a lender which is:

- (i) a company resident in the United Kingdom for United Kingdom tax purposes;
- (ii) a partnership each member of which is either:
 - (I) a company resident in the United Kingdom for United Kingdom tax purposes; or
 - (II) a company not so resident in the United Kingdom which carries on a trade in the United Kingdom through a permanent establishment and which is required to bring into account in computing its chargeable profits (within the meaning of Section 19 of the United Kingdom Corporation Tax Act 2009) the whole of any share of interest payable in respect of that advance that falls to it by reason of Part 17 of the United Kingdom Corporation Tax Act 2009; or
- (iii) a company not so resident in the United Kingdom which carries on a trade in the United Kingdom through a permanent establishment and which brings into account that interest payable in respect of that advance in computing the chargeable profits (for the purposes of Section 19 of the United Kingdom Corporation Tax Act 2009) of that company; or

(C) a lender which:

- (i) is treated as a resident of a jurisdiction having a double taxation agreement with the United Kingdom which makes provision for full exemption from tax imposed by the United Kingdom on interest for the purposes of the treaty; and
- (ii) does not carry on a business in the United Kingdom through a permanent establishment with which the Lender’s participation in the Loan is effectively connected (a “**Treaty Lender**”).

“**U.K. Revolving Exposure**” shall mean, with respect to any Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding U.K. Revolving Loans of such Lender.

“**U.K. Revolving Loan**” shall have the meaning assigned to such term in Section 2.01(a).

“**U.K. Security Agreement**” shall mean, collectively (i) any Security Agreement ~~substantially in the form of Exhibit M-3~~, including all subparts thereto, among ~~the any~~ U.K. Loan Parties (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties, ~~including the U.K. Share Charge and~~ (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any U.K. Loan Party or any Person who is the holder of Equity Interests in any U.K. Loan Party in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of England and Wales (or any

subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

~~“U.K. Share Charge” shall mean shall mean a Security Agreement in substantially the form of Exhibit M-3-2, among the Parent Borrower and the Collateral Agent.~~

“U.K. Swingline Exposure” shall mean at any time the aggregate principal amount at such time of all outstanding U.K. Swingline Loans. The U.K. Swingline Exposure of any Revolving Lender at any time shall equal its Pro Rata Percentage of the aggregate U.K. Swingline Exposure at such time.

“U.K. Swingline Loan” shall mean any loan made by the European Swingline Lender to ~~the~~ U.K. Borrower pursuant to Section 2.17. For the avoidance of doubt, U.K. Swingline Loans shall include Overadvances made as U.K. Swingline Loans.

“Ulsan Joint Venture Partner” shall mean Kobe Steel, Ltd., a company organized under the laws of Japan.

“Ulsan JV Subsidiary” shall mean a joint venture stock company organized, or to be organized, in Korea, and registered, or to be registered, in the Commercial Corporate Registry in Korea.

“Ulsan Sale Agreement” shall mean that certain share sale and purchase agreement, dated as of May 10, 2017, between NKL and the Ulsan Joint Venture Partner, as the same may be amended or modified from time to time.

“Ulsan Share Sale” shall mean the sale, pursuant to the terms of the Ulsan Sale Agreement, by NKL of 49.9%% of the Equity Interests owned by NKL in the Ulsan JV Subsidiary to the Ulsan Joint Venture Partner, for cash in the amount of \$314,370,000, and the subsequent sale by NKL of 0.1% of the Equity Interests owned by NKL in the Ulsan JV Subsidiary to the Ulsan Joint Venture Partner, for cash in the amount of \$630,000.

“United States” shall mean the United States of America.

“Unpaid Supplier Reserve” shall mean, at any time, with respect to the Canadian Loan Parties, the amount equal to the percentage applicable to Inventory in the calculation of the Canadian Borrowing Base multiplied by the aggregate value of the Eligible Inventory which the Administrative Agent, in its Permitted Discretion, considers is or may be subject to a right of a supplier to repossess goods pursuant to Section 81.1 of the Bankruptcy and Insolvency Act (Canada) or any other laws of Canada or any other applicable jurisdiction granting revendication or similar rights to unpaid suppliers, in each case, where such supplier’s right ranks or is capable of ranking in priority to or pari passu with one or more of the First Priority Liens granted in the Security Documents.

“Unrestricted Cash” shall mean cash and Cash Equivalents of the ~~Parent Borrower~~ Designated Company and its Restricted Subsidiaries (in each case, free and clear of all Liens, other than Liens permitted pursuant to Section 6.02(a), (j) (excluding (j)(i)(C), (ii) and (iii)) and (k)), to the extent the use thereof for the application to payment of Indebtedness is not prohibited by law or any contract to which the ~~Parent Borrower~~ Designated Company or any of the Restricted Subsidiaries is a party and excluding cash and Cash Equivalents (i) which are listed as “restricted” on the consolidated balance sheet of the ~~Parent Borrower~~ Designated Company and its Subsidiaries as of such date or (ii) constituting proceeds of a Specified Equity Contribution.

“Unrestricted Grantors” shall mean Loan Parties that are not Restricted Grantors.

“Unrestricted Subsidiary” shall mean any Subsidiary of the ~~Parent Borrower~~ Designated Company designated by the board of directors of the ~~Parent Borrower~~ Designated Company as an Unrestricted Subsidiary pursuant to Section 5.17 subsequent to the Closing Date.

“U.S. Borrower” shall mean (a) each Initial U.S. Borrower, and each other Subsidiary (which is organized under the laws of the United States or any state thereof or the District of Columbia) that is or becomes a party to this Agreement as a U.S. Borrower pursuant to Section 5.11- and (b) on and after the Aleris Acquisition Closing Date, (i) to the extent such Person joins this Agreement as a Borrower on the Aleris Acquisition Closing Date, the Aleris Borrowers organized under the laws of the United States or any state thereof or the District of Columbia, and (ii) each Specified Aleris U.S. Subsidiary that becomes a U.S. Borrower pursuant to Section 2.20 (the U.S. Borrowers under this clause (b), “Additional U.S. Borrowers”).

“U.S. Borrowing Base” shall mean at any time an amount equal to the sum of, without duplication:

(i) the book value of Eligible U.S. Accounts multiplied by the advance rate of 85% (70% in the case of Mexican Accounts not meeting the Credit Insurance Requirement), plus

(ii) the lesser of (i) the advance rate of 75% of the Cost of Eligible U.S. Inventory, or

(ii) the advance rate of 85% of the Net Recovery Cost Percentage multiplied by the Cost of Eligible U.S. Inventory, minus

(iii) any Reserves established from time to time by the Administrative Agent with respect to the U.S. Borrowing Base in accordance with Section 2.01(d) and the other terms of this Agreement;

provided, that during the Aleris Deemed Borrowing Base Period, solely with respect to the Additional U.S. Borrowers that have satisfied the Aleris Deemed Borrowing Base Collateral Conditions, in lieu of clauses (i) and (ii) above (but subject to clause (iii) above), the portion of the

U.S. Borrowing Base attributable to the assets of such Additional U.S. Borrowers, taken as a whole, shall be equal to the lesser of (1) the Additional U.S. Borrowers' Deemed Borrowing Base Allocation in effect at such time, and (2) the Dollar Equivalent of, without duplication, the sum of (x) 65% of the gross Accounts of such Additional U.S. Borrowers, and (y) 60% of the net book value of all Eligible U.S. Inventory of such Additional U.S. Borrowers;

provided, further, that if the Administrative Agent has not received Acceptable Collateral Diligence in respect of any Additional U.S. Borrowers on or prior to the date that is 90 days after the Aleris Acquisition Closing Date, then following such date until the date that the Administrative Agent receives Acceptable Collateral Diligence in respect of such Additional U.S. Borrowers, the assets of each Additional U.S. Borrower for which Acceptable Collateral Diligence has not been provided shall be excluded from the U.S. Borrowing Base, whether or not such assets would otherwise constitute Eligible U.S. Accounts or Eligible U.S. Inventory.

The U.S. Borrowing Base at any time shall be determined by reference to the most recent Borrowing Base Certificate theretofore delivered to the Administrative Agent with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the U.S. Borrowing Base is calculated in accordance with the terms of this Agreement. The Additional U.S. Borrowers' Deemed Borrowing Base Allocation at any time shall be determined by reference to the most recent Borrowing Base Certificate or other certificate theretofore delivered to the Administrative Agent, or in any certificate delivered to the Administrative Agent pursuant to the last paragraph of Section 9.03, with such adjustments as Administrative Agent deems appropriate in its Permitted Discretion to assure that the U.S. Borrowing Base is calculated in accordance with the terms of this Agreement.

"U.S. GAAP" shall have the meaning assigned to such term in Section 1.04.

"U.S. LC Exposure" shall mean at any time the Dollar Equivalent of the sum of the stated amount of all outstanding U.S. Letters of Credit at such time. The U.S. LC Exposure of any Revolving Lender at any time shall mean its Pro Rata Percentage of the aggregate U.S. LC Exposure at such time.

"U.S. Letter of Credit" shall have the meaning assigned to such term in Section 2.18(a).

"U.S. Reimbursement Obligations" shall mean each applicable Borrower's obligations under Section 2.18 to reimburse LC Disbursements in respect of U.S. Letters of Credit.

"U.S. Revolving Exposure" shall mean, with respect to any Revolving Lender at any time, the Dollar Equivalent of the aggregate principal amount at such time of all outstanding U.S. Revolving Loans of such Lender, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's U.S. LC Exposure, plus the Dollar Equivalent of the aggregate amount at such time of such Lender's U.S. Swingline Exposure.

"U.S. Revolving Loan" shall have the meaning assigned to such term in Section 2.01(a).

"U.S. Security Agreement" shall mean, collectively (i) any Security Agreement ~~substantially in the form of Exhibit M-1~~, including all subparts thereto, among ~~the~~any U.S. Loan Parties (and such other Persons as may be party thereto) and the Collateral Agent for the benefit of the Secured Parties ~~and~~, (ii) each pledge agreement, mortgage, security agreement, guarantee or other agreement that is entered into by any U.S. Loan Party or any Person who is the holder of Equity Interests in any U.S. Loan Party in favor of the Collateral Agent and/or the Term Loan Collateral Agent, ~~and in its capacity as agent for the Secured Parties pursuant to the terms of the Intercreditor Agreement and the other Loan Documents, and~~ (iii) any other pledge agreement, mortgage, security agreement or other agreement entered into pursuant to the terms of the Loan Documents, in the case of each of clauses (i), (ii) and (iii), that is governed by the laws of the United States (or any subdivision thereof), securing the Secured Obligations, and entered into pursuant to the terms of this Agreement or any other Loan Document, as the same may be amended, restated or otherwise modified from time to time.

"U.S. Swingline Exposure" shall mean at any time the aggregate principal amount at such time of all outstanding U.S. Swingline Loans. The U.S. Swingline Exposure of any Revolving Lender at any time shall equal its Pro Rata Percentage of the aggregate U.S. Swingline Exposure at such time.

"U.S. Swingline Lender" shall have the meaning assigned to such term in the preamble hereto.

"U.S. Swingline Loan" shall have the meaning assigned to such term in Section 2.17(a).

"Vendor Managed Inventory" shall mean Inventory of a U.S. Borrower, a Canadian Loan Party, or an Eligible U.K. Loan Party located in the ordinary course of business of such Loan Party at a customer location that has been disclosed to the Administrative Agent in Schedule 3.24 to Amendment No. 2 or in a Borrowing Base Certificate or updates to the Perfection Certificate.

"Voting Stock" shall mean, with respect to any person, any class or classes of Equity Interests pursuant to which the holders thereof have the general voting power under ordinary circumstances to elect at least a majority of the Board of Directors of such person.

"Weighted Average Life to Maturity" shall mean, when applied to any Indebtedness at any date, the number of years obtained by dividing: (a) the sum of the products obtained by multiplying (i) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect thereof, by (ii) the number of years (calculated to the nearest

one-twelfth) that will elapse between such date and the making of such payment; by (b) the then outstanding principal amount of such Indebtedness.

“**Wells Fargo**” shall mean Wells Fargo Bank, National Association, a national banking association, and its successors.

“**Wells Fargo Indemnites**” shall mean Wells Fargo and its officers, directors, employees, Affiliates, agents and attorneys.

“**Wholly Owned Subsidiary**” shall mean, as to any person, (a) any corporation 100% of whose capital stock (other than directors’ qualifying shares) is at the time owned by such person and/or one or more Wholly Owned Subsidiaries of such person and (b) any partnership, association, joint venture, limited liability company or other entity in which such person and/or one or more Wholly Owned Subsidiaries of such person have a 100% equity interest at such time.

“**Wind-Up**” shall have the meaning assigned to such term in Section 6.05(g), and “Winding-Up” shall have a meaning correlative thereto.

“**Wind Up Triggering Event**” shall mean the occurrence of any of the following: (i) The board of directors of any Borrower or Guarantor passes a resolution to terminate or wind-up in whole or in part any Canadian Defined Benefit Plan or any Borrower or Guarantor otherwise initiates any action or filing to voluntarily terminate or wind up in whole or in part any Canadian Defined Benefit Plan; (ii) the institution of proceedings by any Governmental Authority to terminate in whole or in part any Canadian Defined Benefit Plan, including notice being given by the Superintendent of Financial Services or another Governmental Authority that it intends to proceed to wind-up in whole or in part a Borrower’s or Guarantor’s Canadian Defined Benefit Plan; (iii) there is a cessation or suspension of contributions to the fund of a Canadian Defined Benefit Plan that are made in accordance with the terms of the Canadian Defined Benefit Plans or Applicable Law by a Borrower or Guarantor (other than a cessation or suspension of contributions that is due to an administrative error; (iv) the receipt by a Borrower or Guarantor of correspondence from any Governmental Authority related to the likely wind up or termination (in whole or in part) of any Canadian Defined Benefit Plan; (v) the wind up or partial wind up of a Canadian Defined Benefit Plan; and (vi) there is a cessation or suspension of crediting of benefits under a Canadian Defined Benefit Plan (excluding, for greater certainty, where such cessation or suspension would not trigger a wind-up or partial wind-up under the laws of any applicable Canadian jurisdiction). Notwithstanding anything to the contrary herein, a Wind Up Triggering Event shall not include any event that relates to the partial wind up or termination of solely a defined contribution component of a Canadian Defined Benefit Plan.

“**Withdrawal Liability**” shall mean liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

“**Write-Down and Conversion Powers**” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

SECTION 1.02 Classification of Loans and Borrowings and Commitments.

For purposes of this Agreement, Loans may be classified and referred to by Class or Sub-Class (e.g., a “U.S. Revolving Loan” or a “Swiss Revolving Loan”) or by Type (e.g., a “Eurocurrency Loan”) or by Class (or Sub-Class) and Type (e.g., a “Eurocurrency U.S. Revolving Loan”).

Borrowings also may be classified and referred to by Class or Sub-Class (e.g., a “U.K.

Borrowing”) or by Type (e.g., a “Base Rate Borrowing”) or by Class or Sub-Class and Type (e.g., a “Eurocurrency U.S. Borrowing”).

Notwithstanding anything to the contrary herein or in any other Loan Document, the Revolving Commitments and the Specified Incremental Commitments shall be treated as a single Class for purposes of determining whether the consent of the Lenders, the Required Lenders, or any other percentage of Lenders required under any Loan Document, has been obtained for purposes of this Agreement and the other Loan Documents.

SECTION 1.03 Terms Generally; Alternate Currency Transaction. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include,” “includes” and “including” shall be deemed to be followed by the phrase “without limitation.” The word “will” shall be construed to have the same meaning and effect as the word “shall.” Unless the context requires otherwise (a) any definition of or reference to any Loan Document, agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document (including any Organizational Document) as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein or in any other Loan Document, including the restrictions set forth in the definition of Aleris Merger Agreement), (b) any reference herein to any person shall be construed to include such person’s successors and assigns, (c) any reference to a Subsidiary of a Person shall include any direct or indirect Subsidiary of such Person, (d) the words “herein,” “hereof” and “hereunder,” and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (e) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement, (f) any reference to any law or regulation herein shall include all statutory and regulatory provisions consolidating, amendment or interpreting such law or regulation and any reference to any law or regulation shall, unless otherwise specified, refer to such law or regulation as amended, modified or supplemented from time to time, (g) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights and (h) “on,” when used with respect to the Mortgaged Property or any property adjacent to the Mortgaged Property, means “on, in, under, above or about.” For purposes of this Agreement and the other Loan Documents, (i) where the permissibility of a transaction or determinations of required actions or circumstances depend upon compliance with, or are determined by reference to, amounts stated in Dollars, such amounts shall be deemed to refer to Dollars or Dollar Equivalents and any requisite currency translation shall be based on the Spot Selling Rate in effect on the Business Day immediately preceding the date of such transaction or determination and the permissibility of actions taken under ARTICLE VI shall not be affected by subsequent fluctuations in exchange rates (provided that if Indebtedness is incurred to refinance other

Indebtedness, and such refinancing would cause the applicable Dollar denominated limitation to be exceeded if calculated at the Spot Selling Rate in effect on the Business Day immediately preceding the date of such refinancing, such Dollar denominated restriction shall be deemed not to have been exceeded so long as (x) such refinancing Indebtedness is denominated in the same currency as such Indebtedness being refinanced and (y) the principal amount of such refinancing Indebtedness does not exceed the principal amount of such Indebtedness being refinanced except as permitted by the definition of Permitted Refinancing Indebtedness) and (ii) as of any date of determination, for purposes of the pro rata application of any amounts required to be applied hereunder to the payment of Loans or other Obligations which are denominated in more than a single Approved Currency, such pro rata application shall be determined by reference to the Dollar Equivalent of such Loans or other Obligations as of such date of determination. For purposes of this Agreement and the other Loan Documents, the word "foreign" shall refer to jurisdictions other than the United States, the states thereof and the

District of Columbia. For purposes of this Agreement and the other Loan Documents, the words "the applicable borrower" (or words of like import), when used with reference to obligations of any U.S. Borrower, shall refer to the U.S. Borrowers on a joint and several basis. From and after the effectiveness of the Permitted Holdings Amalgamation (x) all references to the

~~Parent Canadian~~ Borrower in any Loan Document shall refer to the Successor ~~Parent Canadian~~

Borrower and (y) all references to Holdings in any Loan Document shall refer to Successor Holdings. Each reference to the "Issuing Bank" shall refer to the applicable Issuing Bank or Issuing Banks, as the context may require.

SECTION 1.04 Accounting Terms; GAAP. Except as otherwise expressly provided

herein, all financial statements to be delivered pursuant to this Agreement shall be prepared in accordance with generally accepted accounting principles in the United States applied on a consistent basis as in effect from time to time ("U.S. GAAP") and all terms of an accounting or financial nature shall be construed and interpreted in accordance with U.S. GAAP, as in effect from time to time unless otherwise agreed to by ~~Parent Borrower~~ the Designated Company, and the Required Lenders or as set forth below; provided that (i) the ~~Parent Borrower~~ Designated Company may elect to convert from U.S. GAAP for the purposes of preparing its financial statements and keeping its books and records to IFRS and if the ~~Parent Borrower~~ Designated Company makes such election it shall give prompt written notice to the Administrative Agent and the Lenders within five Business Days of such election, along with a reconciliation of the ~~Parent Borrower's~~ Designated Company's financial statements covering the four most recent fiscal quarters for which financial statements are available (including a reconciliation of the ~~Parent Borrower's~~ Designated Company's audited financial statements prepared during such period), (ii) upon election of any conversion to IFRS, the Administrative Agent, the Lenders and

the ~~Parent Borrower~~ Designated Company, shall negotiate in good faith to amend the financial ratios and requirements and other terms of an accounting or a financial nature in the Loan Documents to preserve the original intent thereof in light of such conversion to IFRS (subject to the approval of the Required Lenders); provided that, until so amended (x) such ratios or requirements (and all terms of an accounting or a financial nature) shall continue to be computed in accordance with U.S. GAAP prior to such conversion to IFRS and (y) the ~~Parent Borrower~~ Designated Company, shall provide to the Administrative Agent and the Lenders any documents and calculations required under this Agreement or as reasonably requested hereunder by the Administrative Agent or any Lender setting forth a reconciliation between calculations of such ratios and requirements and other terms of an accounting or a financial nature made before and after giving effect to such conversion to IFRS and (iii) if at any time any change in U.S. GAAP or change in IFRS would affect the computation of any financial ratio or requirement or other terms of an accounting or a financial nature set forth in any Loan Document, and the ~~Parent Borrower~~ Designated Company, or the Required Lenders shall so request, the Administrative

Agent, the Lenders and the ~~Parent Borrower~~ Designated Company, shall negotiate in good faith to amend such ratio or requirement or other terms of an accounting or a financial nature to preserve the original intent thereof in light of such change in U.S. GAAP or change in IFRS (subject to the approval of the Required Lenders); provided that, until so amended, (x) such ratio or requirement or other terms of an accounting or a financial nature shall continue to be computed in accordance with U.S. GAAP prior to such change therein or change in IFRS and (y) the ~~Parent Borrower~~ Designated Company, shall provide to the Administrative Agent and the Lenders any documents required under this Agreement or as reasonably requested hereunder setting forth a reconciliation between calculations of such ratio or requirement or other terms of an accounting or a financial nature made before and after giving effect to such change in U.S. GAAP or change in IFRS. Notwithstanding the foregoing, for purposes of determining compliance with any covenant (including the computation of any financial covenant) contained herein, Indebtedness of Holdings, the ~~Parent Borrower~~ Designated Company and its Subsidiaries shall be deemed to be carried at 100% of the outstanding principal amount thereof, and the effects of FASB ASC 825 on financial liabilities shall be disregarded. For the avoidance of doubt, with respect to the incurrence of any Indebtedness or the making of any Investment, Asset Sale, Sale Leaseback Transaction or Restricted Payment in reliance on any provision of Article IV hereof that is based on a percentage of Consolidated Net Tangible Assets, such provision shall be deemed to be tested solely upon incurrence of such Indebtedness or the making of such Investment, Asset Sale, Sale Leaseback Transaction or Restricted Payment with respect to Consolidated Net Tangible Assets as of the end of the most recent period for which financial statements have been delivered under Section 5.01(a) or (b). Notwithstanding anything to the contrary in this Agreement, regardless of whether Ulsan JV Subsidiary is a Subsidiary, the financial results of Ulsan JV Subsidiary shall be included in all consolidated financial results of ~~Novelis Inc.~~ the Designated Company and its Subsidiaries to the extent ~~Novelis Inc.~~ the Designated Company consolidates the results of Ulsan JV Subsidiary in its financial statements in accordance with U.S. GAAP; provided that the proportionate interest of the Ulsan Joint Venture Partner in the Ulsan JV Subsidiary and any liability of the Ulsan JV Subsidiary to pay Distributions to the Ulsan Joint Venture Partner with respect to such proportionate interest shall be excluded for the purposes of all financial definitions under this Agreement. Notwithstanding anything to the contrary in this Agreement, nothing in this Agreement shall be deemed to require the consolidation of Ulsan JV Subsidiary into the consolidated financial results of the ~~Parent Borrower~~ Designated Company, to the extent not required under U.S. GAAP.

SECTION 1.05 Resolution of Drafting Ambiguities. Each Loan Party acknowledges and agrees that it was represented by counsel in connection with the execution and delivery of the Loan Documents to which it is a party, that it and its counsel reviewed and participated in the

preparation and negotiation hereof and thereof and that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be employed in the interpretation hereof or thereof.

SECTION 1.06 Pro Forma Calculations. Notwithstanding anything to the contrary herein, the Senior Secured Net Leverage Ratio and the Consolidated Interest Coverage Ratio shall be calculated on a Pro Forma Basis (Leverage) with respect to each Specified Transaction occurring during the applicable four quarter period to which such calculation relates, or subsequent to the end of such four-quarter period but not later than the date of such calculation.

SECTION 1.07 Divisions. For all purposes under the Loan Documents, in connection with any division or plan of division under Delaware law (or any comparable event under a different jurisdiction's laws): (a) if any asset, right, obligation or liability of any Person becomes the asset, right, obligation or liability of a different Person, then it shall be deemed to have been transferred from the original Person to the subsequent Person, and (b) if any new Person comes into existence, such new Person shall be deemed to have been organized on the first date of its existence by the holders of its Equity Interests at such time.

ARTICLE II

THE CREDITS

SECTION 2.01 Commitments.

(a) Subject to the terms and conditions and relying upon the representations and warranties herein set forth, each Lender with a Revolving Commitment agrees, severally and not jointly, at any time and from time to time on or after the Closing Date until the earlier of the Business Day prior to the Maturity Date and the termination of the Revolving Commitment of such Lender in accordance with the terms hereof, to make revolving loans

(~~w~~y) to the U.S. Borrowers, jointly and severally, or to the ~~Parent~~Canadian Borrower, in any Approved Currency (each, a "U.S. Revolving Loan"), (~~x~~w) to ~~the each~~ Swiss Borrower, severally and not jointly, in euros, Dollars or GBP (each, a "Swiss Revolving Loan"); (~~y~~) to the; provided that Swiss Revolving Loans shall not be made available to Aleris Switzerland on or prior to the Aleris Acquisition Closing Date or otherwise in connection with the Aleris Acquisition (other than Swiss Revolving Loans borrowed on the Aleris Acquisition Closing Date to repay outstanding Indebtedness of Aleris Switzerland); (~~x~~) to each German Borrower, severally and not jointly, in euros, Dollars or GBP (each, a "German Revolving Loan"); and (~~z~~y) to the ~~U.K.~~Belgian Borrower, in euros, Dollars or GBP (each, a "Belgian Revolving Loan"); and (~~z~~) to each U.K. Borrower, severally and not jointly, in euros, Dollars or GBP

(~~each, a~~ "U.K. Revolving Loan" and, collectively with the Swiss Revolving Loans, the German Revolving Loans, the Belgian Revolving Loans and the U.S. Revolving Loans, each a "Revolving Loan"), in an aggregate principal amount that does not result in:

(i) such Lender's Revolving Exposure exceeding such Lender's Revolving Commitment less such Lender's ratable portion of Availability Reserves;

(ii) (A) the Total Adjusted Revolving Exposure (Belgian) exceeding the Total Adjusted Borrowing Base (Belgian); (B) the Total Adjusted Revolving Exposure (German) exceeding the Total Adjusted Borrowing Base (German), (~~B~~C) the Total Adjusted Revolving Exposure (Swiss) exceeding the Total Adjusted Borrowing Base (Swiss), or (~~E~~D) the Total Adjusted Revolving Exposure exceeding the Total Adjusted Borrowing Base (in each case subject to the Administrative Agent's authority in its sole discretion to make Overadvances pursuant to the terms of Section 2.01(e)); ~~or~~

(iii) (~~x~~) the sum of (1) the amount by which the Aggregate Belgian Revolving Exposure exceeds the Belgian Borrowing Base plus (2) the sum, for all German Borrowers, of the amounts by which the Aggregate Individual German Revolving Exposure applicable to each German Borrower exceeds such German Borrower's German Borrowing Base, plus (3) the sum, for all Swiss Borrowers, of the amounts by which the Aggregate Individual Swiss Revolving Exposure applicable to each Swiss Borrower exceeds such Swiss Borrower's Swiss Borrowing Base, plus (4) the Total Adjusted Revolving Exposure, exceeding (y) the Total Adjusted Borrowing Base;

(iv) the Aggregate Belgian Revolving Exposure exceeding the sum of (x) the Total Adjusted Borrowing Base plus (y) the Belgian Borrowing Base;

(v) for each German Borrower, (x) the Aggregate Individual German Revolving Exposure applicable to such German Borrower exceeding (y) the sum of (1) the Total Adjusted Borrowing Base plus (2) such German Borrower's German Borrowing Base;

(vi) for each Swiss Borrower, (x) the Aggregate Individual Swiss Revolving Exposure applicable to such Swiss Borrower exceeding (y) the sum of (1) the Total Adjusted Borrowing Base plus (2) such Swiss Borrower's Swiss Borrowing Base; or

(~~iii~~vii) the Total Revolving Exposure exceeding the lesser of (I) the Total Borrowing Base (subject to the Administrative Agent's authority in its sole discretion to make Overadvances pursuant to the terms of Section 2.01(e)), and (II) the Total Revolving Commitment less Availability Reserves (the foregoing clauses (i), (ii)(A) through (ii)(D), and (iii) through (vii), the "Funding Conditions").

(b) ~~{intentionally omitted.}~~

(b) Notwithstanding anything to the contrary in any Loan Document, (i) the Specified Incremental Commitments shall not be available for Loans or Letters of Credit hereunder until the Specified Incremental Commitment Availability Date and (ii) on and after the Specified Incremental Commitment Availability Date, the Specified Incremental Commitments at such time (if any), shall constitute Revolving Commitments for all purposes under the Loan Documents and shall not constitute a separate Class hereunder; provided that

if the Specified Incremental Commitment Availability Date does not occur on or prior to the date that is 6 months after the Amendment No. 2 Effective Date, the Specified Incremental Commitments shall be deemed to be zero for all purposes under the Loan Documents. Prior to the Specified Incremental Commitment Availability Date, for purposes of Section 2.07, the Specified Incremental Commitments shall be treated as a separate Class and may be reduced or terminated by the Administrative Borrower from time to time on a non-pro rata basis with the commitments under any other Class.

(c) Within the limits set forth above and subject to the terms, conditions and limitations set forth herein, the Borrowers may borrow, pay or prepay and reborrow Revolving Loans.

(d) Notwithstanding anything to the contrary in this Agreement, the Administrative Agent shall have the right to establish Availability Reserves against the Commitments, and/or Availability Reserves and other Reserves against the Borrowing Base, in each case in such amounts, and with respect to such matters, as the Administrative Agent in its Permitted Discretion shall deem necessary, including, without limitation (but without duplication), (i) sums that the respective Borrowers or Borrowing Base Guarantors are or will be required to pay (such as taxes (including payroll and sales taxes), assessments, insurance premiums, amounts owed to tolling parties, processors or other third parties (including Norf GmbH), or, in the case of leased assets, rents or other amounts payable under such leases) and have not yet paid, whether or not invoiced, (ii) amounts owing by the respective Borrowers or Borrowing Base Guarantors or, without duplication, their respective Subsidiaries to any Person in respect of any Lien of the type described in the definition of "First Priority" on any of the Collateral, which Lien, in the Permitted Discretion of the Administrative Agent, is reasonably likely to rank senior in priority to or pari passu with one or more of the Liens granted in the Security Documents in and to such item of the Collateral (including as a result of any Permitted Reorganization Action or Permitted Aleris Foreign Subsidiary Transfer), (iii) an Unpaid Supplier Reserve and a Reserve against prior claims of Logan, in each case, against Eligible Inventory included in the Borrowing Base, (iv) an Inventory Reserve, in each case, against Eligible Inventory included in the Borrowing Base, (v) Rent Reserves and Reserves for Priority Payables, (vi) a Bank Product Reserve, and (vii) a Dilution Reserve; provided, however, that (y) the amount of any Reserve established by the Administrative Agent shall have a reasonable relationship to the event, condition or other matter that is the basis for the Reserve, and (z) Reserves shall not duplicate eligibility criteria contained in the definitions of "Eligible Accounts" or "Eligible Inventory" or reserves or criteria deducted in computing the cost of Eligible Inventory or the Net Recovery Cost Percentage of Eligible Inventory. ~~The~~ Except as otherwise provided under this Agreement, the Administrative Agent shall provide the Administrative Borrower with at least three (3) Business Days' prior written notice of any such establishment. Upon delivery of written notice to Administrative Borrower, the Administrative Agent shall be available to discuss the proposed Reserve, and the applicable Borrower or Borrowing Base Guarantor may take such action as may be required so that the event, condition or matter that is the basis for such Reserve no longer exists, in a manner and to the extent reasonably satisfactory to the Administrative Agent in the exercise of its Permitted Discretion. In no event shall such notice and opportunity limit the right of the Administrative Agent to establish such Reserve, unless the Administrative Agent shall have determined in its Permitted Discretion that the event, condition or other matter that is the basis for such new Reserve no longer exists or has otherwise been adequately addressed.

(e) The Administrative Agent shall not, without the prior consent of the Required Lenders, make (and shall use its reasonable best efforts to prohibit the Issuing Banks and Swingline Lenders, as applicable, from making) any Revolving Loans or Swingline Loans, or provide any Letters of Credit, to the Borrowers on behalf of Lenders intentionally and with actual knowledge that such Revolving Loans, Swingline Loans, or Letters of Credit would either (i) ~~cause the Total Revolving Exposure to exceed the lesser of (A) the Total Borrowing Base, and (B) the Total Revolving Commitment less Availability Reserves, (ii)(A) cause the Total Adjusted Revolving Exposure (German) to exceed the Total Adjusted Borrowing Base (German), (B) cause the Total Adjusted Revolving Exposure (Swiss) to exceed the Total Adjusted Borrowing Base (Swiss) or (C) cause the Total Adjusted Revolving Exposure to exceed the Total Adjusted Borrowing Base, or (iii) be made when one or more of the Funding Conditions, LC Conditions (solely in the case of a Letter of Credit), or Swingline Conditions (solely in the case of a Swingline Loan), cannot be satisfied (or would not be satisfied after giving effect thereto) or (ii)~~ be made when one or more of the other conditions precedent to the making of Loans hereunder cannot be satisfied, except that Administrative Agent may make (or cause to be made) such additional Revolving Loans (including U.S. Swingline Loans) or European Swingline Loans or provide such additional Letters of Credit on behalf of Lenders (each an "Overadvance" and collectively, the "Overadvances"), intentionally and with actual knowledge that such Loans or Letters of Credit will be made without the satisfaction of the foregoing conditions precedent, if the Administrative Agent deems it necessary or advisable in its discretion to do so; provided, that: (A) the total principal amount outstanding at any time of Overadvances to the Borrowers which Administrative Agent may make or provide (or cause to be made or provided) after obtaining such actual knowledge that the conditions precedent have not been satisfied, shall not (I) exceed the amount equal to 5% of the Total Borrowing Base, or, when aggregated with all Credit Protective Advances then outstanding, 7.5% of the Total Borrowing Base, and (II) shall not, without the consent of all Lenders, cause the Total Revolving Exposure to exceed the Adjusted Total Revolving Commitment of all of the Lenders less Availability Reserves, or such Lender's Pro Rata Percentage of the Total Revolving Exposure to exceed such Lender's Revolving Commitment less such Lender's Pro Rata Percentage of Availability Reserves, (B) without the consent of all Lenders, (I) no Overadvance shall be outstanding for more than sixty (60) days and (II) after all Overadvances have been repaid, Administrative Agent shall not make any additional Overadvance unless sixty (60) days or more have elapsed since the last date on which any Overadvance was outstanding and (C) Administrative

Agent (or, after payment by Lenders of the applicable Class of their Pro Rata Percentage of any such Overadvance, such Lenders) shall be entitled to recover such funds on demand from the applicable Borrower or Borrowers together with interest thereon for each day from the date such payment was due until the date such amount is paid to Administrative Agent (or such Lenders) at the interest rate otherwise applicable to Loans of such Class and Type (including interest at the Default Rate, if applicable). Each Lender of the applicable Class shall be obligated to pay Administrative Agent the amount of its Pro Rata Percentage of any such Overadvance, provided, that such Administrative Agent is acting in accordance with the terms of this Section 2.01(e). Overadvances shall constitute Revolving Loans (or European Swingline Loans), shall be payable on demand and shall constitute Obligations secured by the Collateral entitled to all the benefits of the Loan Documents. Any funding of an Overadvance or sufferance of an Overadvance shall not constitute a waiver by any Agent or any Lender of the Event of Default caused thereby. In no event shall any Borrower be deemed a beneficiary of this Section 2.01(e) nor authorized to enforce any of its terms.

(f) The Administrative Agent shall be authorized, in its discretion, at any time that any conditions in Section 4.02 are not satisfied, to make Base Rate Loans (“**Protective Advances**”) (i) if the Administrative Agent deems such Loans necessary or desirable to preserve or protect Collateral, or to enhance the collectibility or repayment of Obligations (“**Credit Protective Advances**”), provided, that the total principal amount outstanding at any time of Credit Protective Advances shall not exceed the amount equal to 5% of the Total Borrowing Base, or, when aggregated with all Overadvances then outstanding, 7.5% of the Total Borrowing Base, or (ii) to pay any other amounts chargeable to the Loan Parties under any Loan Documents, including costs, fees and expenses; provided further, that the total principal amount outstanding at any time of Protective Advances shall not, without the consent of all Lenders, cause the Total Revolving Exposure to exceed the Adjusted Total Revolving Commitment of all of the Lenders less Availability Reserves, or such Lender’s Pro Rata Percentage of the Total Revolving Exposure to exceed such Lender’s Revolving Commitment less such Lender’s Pro Rata Percentage of Availability Reserves. Each Lender shall participate in each Protective Advance in accordance with its Pro Rata Percentage. Required Lenders may at any time revoke Administrative Agent’s authority to make further Protective Advances by written notice to the Administrative Agent. Absent such revocation, the Administrative Agent’s determination that funding of a Protective Advance is appropriate shall be conclusive.

SECTION 2.02 Loans.

(a) Each Loan (other than Swingline Loans) shall be made as part of a Borrowing consisting of Loans made by the Lenders ratably in accordance with their applicable Commitments; provided, that the failure of any Lender to make its Loan shall not in itself relieve any other Lender of its obligation to lend hereunder (it being understood, however, that no Lender shall be responsible for the failure of any other Lender to make any Loan required to be made by such other Lender). Except for Swingline Loans, Protective Advances and Loans deemed made pursuant to Section 2.18, each Borrowing shall be in an aggregate principal amount that is not less than (and in integral amounts consistent with) the Minimum

Currency Threshold or, if less, equal to the remaining available balance of the applicable Commitments.

(b) Subject to Section 2.11 and Section 2.12, (i) each Borrowing of Dollar Denominated Loans shall be comprised entirely of Base Rate Loans or Eurocurrency Loans as Administrative Borrower may request pursuant to Section 2.03 (provided that Base Rate Loans shall be available only with respect to Dollar Denominated Loans borrowed by U.S. Borrowers or ~~Parent~~the Canadian Borrower), (ii) each Borrowing of GBP Denominated Loans or Swiss Franc Denominated Loans shall be comprised entirely of Eurocurrency Loans, and (iii) each Borrowing of Euro Denominated Loans shall be comprised entirely of EURIBOR Loans; provided that all Loans comprising the same Borrowing shall at all times be of the same Type. Each Lender may at its option make any Eurocurrency Loan or EURIBOR Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan (and the first proviso to Section 2.16(a) shall apply to such Loan mutatis mutandis unless such Loan is funded by such branch or Affiliate in accordance with Section 2.16(b)); provided that any exercise of such option shall not affect the obligation of the applicable Borrower to repay such Loan in accordance with the terms of this Agreement; and provided, further, that with respect to any Loan (and so long as no Event of Default shall have occurred and is continuing), if such Lender is a Swiss Qualifying Bank, such branch or Affiliate must also qualify as a Swiss Qualifying Bank. Borrowings of more than one Type may be outstanding at the same time; provided that Borrower shall not be entitled to request any Borrowing that, if made, would result in more than eight Eurocurrency Borrowings in Dollars, five Eurocurrency Borrowings in GBP, or eight EURIBOR Borrowings outstanding hereunder at any one time. For purposes of the foregoing, Borrowings having different Interest Periods, regardless of whether they commence on the same date, shall be considered separate Borrowings.

(c) Except with respect to Loans deemed made pursuant to Section 2.18(b) and Swingline Loans, each Lender shall make each Loan to be made by it hereunder (or, to the extent permitted by Section 2.02(b), shall cause any domestic or foreign branch or Affiliate of such Lender to make such Loan) on the proposed date thereof by wire transfer of immediately available funds to such account in San Francisco, or to such account in a European jurisdiction, as the Administrative Agent may designate, not later than 2:00 p.m., New York time (1:00 p.m., London time in the case of Revolving Loans made in GBP or Euros), and the Administrative Agent shall promptly credit the amounts so received to an account of the applicable Borrower as directed by the Administrative Borrower in the applicable Borrowing Request maintained with (or otherwise acceptable to) the Administrative Agent or, if a Borrowing shall not occur on such date because any condition precedent herein specified shall not have been met, return the amounts so received to the respective Lenders.

(d) Unless the Administrative Agent shall have received notice from a Lender prior to the time of any Borrowing that such Lender will not make available to the Administrative Agent such Lender’s portion of such Borrowing, the Administrative Agent may assume that such Lender has made such portion available to the Administrative Agent on the date of such Borrowing in accordance with paragraph (c) above, and the Administrative Agent may, in reliance upon such assumption, make available to the applicable Borrower on such date a corresponding amount. If the Administrative Agent shall have so made funds available, then, to the extent that such Lender shall not have made such portion available to the Administrative Agent, each of such Lender and such Borrower severally agrees to repay to the Administrative Agent forthwith

on demand such corresponding amount together with interest thereon, for each day from the date such amount is made available to such Borrower until the date such amount is repaid to the Administrative Agent at (i) in the case of such Borrower, the interest rate applicable at the time to the Loans comprising such Borrowing and (ii) in the case of such Lender, the greater of the Interbank Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation. If such Lender shall repay to the Administrative Agent such corresponding amount, such amount shall constitute such Lender's Loan as part of such Borrowing for purposes of this Agreement, and the applicable Borrower's obligation to repay the Administrative Agent such corresponding amount pursuant to this Section 2.02(d) shall cease.

(e) Notwithstanding anything to the contrary contained herein, no Borrower shall be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Maturity Date.

SECTION 2.03 Borrowing Procedure.

(a) To request a Borrowing (subject to Section 2.17(e) with respect to European Swingline Loans), the Administrative Borrower, on behalf of the applicable Borrower, shall deliver, by hand delivery, telecopier or, to the extent separately agreed by the Administrative Agent, by an electronic communication in accordance with the second sentence of Section 11.01(b) and the second paragraph of Section 11.01(d), a duly completed and executed Borrowing Request to the Administrative Agent (i) in the case of a Eurocurrency Borrowing (other than a Eurocurrency Borrowing made in GBP), not later than 12:00 noon, New York time, three (3) Business Days before the date of the proposed Borrowing, (ii) in the case of a EURIBOR Borrowing, or a Eurocurrency Borrowing made in GBP, not later than 11:00 a.m., London time, three (3) Business Days before the date of the proposed Borrowing, or (iii) in the case of a Base Rate Borrowing, not later than 12:00 noon, New York time, on the date of the proposed Borrowing. All Borrowing Requests which are not made on-line via the Administrative Agent's electronic platform or portal shall be subject to (and unless the Administrative Agent elects otherwise in the exercise of its sole discretion, such Borrowings shall not be made until the completion of) the Administrative Agent's authentication process (with results satisfactory to the Administrative Agent) prior to the funding of any such requested Borrowing. Each Borrowing Request shall be irrevocable and shall specify the following information in compliance with Section 2.02:

(i) the aggregate amount of such Borrowing;

(ii) the date of such Borrowing, which shall be a Business Day;

(iii) whether such Borrowing shall constitute a Borrowing of U.S. Revolving Loans, U.K. Revolving Loans, Belgian Revolving Loans, German Revolving Loans or Swiss

Revolving Loans;

(iv) in the case of Dollar Denominated Loans made to U.S. Borrowers or to ~~Parent~~the Canadian Borrower, whether such Borrowing is to be a Base Rate Borrowing or a Eurocurrency Borrowing;

(v) ~~(x)~~ in the case of U.S. Revolving Loans, whether such Borrowing is to be made to the U.S. Borrowers or the ~~Parent Borrower~~Canadian Borrower, and the names of the applicable Borrowers and (y) in the case of a German Revolving Loan or a Swiss Revolving Loan, the names of the applicable Borrowers;

(vi) in the case of a Eurocurrency Borrowing or EURIBOR Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated, as applicable, by the definition of the term "Eurocurrency Interest Period" or "EURIBOR Interest Period";

(vii) the location and number of the applicable Borrower's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.02(c);

(viii) that the conditions set forth in Section 4.02(b) - (d) have been satisfied as of the date of the notice; and

(ix) in the case of a Eurocurrency Borrowing in an Alternate Currency, the Approved Currency for such Borrowing;

provided, that notwithstanding anything to the contrary in any Loan Document, Aleris Switzerland shall not be permitted to borrow or request a Borrowing on the Aleris Acquisition Closing Date or otherwise in connection with the Aleris Acquisition (other than a borrowing on the Aleris Acquisition Closing Date to repay outstanding Indebtedness of Aleris Switzerland).

If no election as to the Type of Borrowing is specified with respect to a Borrowing of Dollar Denominated Loans made to U.S. Borrowers or to ~~Parent~~the Canadian Borrower, then the requested Borrowing shall be a Base Rate Borrowing. If no Interest Period is specified with respect to any requested EURIBOR Borrowing or Eurocurrency Borrowing, then the Administrative Borrower on behalf of the applicable Borrower shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section, the Administrative Agent shall advise each applicable Lender of the details thereof and of the amount of such Lender's Loan to be made as part of the requested Borrowing.

(b) Appointment of Administrative Borrower. Each Borrower hereby irrevocably appoints and constitutes Administrative Borrower as its agent to request Loans and Letters of Credit pursuant to this Agreement in the name or on behalf of such Borrower. The Administrative Agent and Lenders may disburse the Loans to such bank account of Administrative Borrower or a Borrower or otherwise make such Loans to a Borrower and provide such Letters of Credit to a Borrower as Administrative Borrower may designate or direct, without notice to any other Borrower or Guarantor. Each Loan Party hereby irrevocably appoints and constitutes Administrative Borrower as its agent to receive statements of account and all other notices from the Agents and Lenders with respect to the Obligations or otherwise under or in connection with this Agreement and the other Loan Documents, including the Intercreditor Agreement. Any notice, election, representation, warranty, agreement or undertaking by or on behalf of any other Loan Party by Administrative Borrower shall be deemed for all purposes to have been made by such Loan Party, as the case may be, and shall be binding upon and enforceable against such Loan Party to the same extent as if made directly by such Loan Party. Administrative Borrower hereby accepts the appointment by Borrowers and the other Loan Parties to act as the agent of Borrowers and the other Loan Parties and agrees to ensure that the disbursement of any Loans to a Borrower requested by or paid to or for the account of such Borrower, or the issuance of any Letter of Credit for a Borrower hereunder, shall be paid to or for the account of such Borrower. No purported termination of the appointment of Administrative Borrower as agent as aforesaid shall be effective, except after ten (10) days' prior written notice to Administrative Agent and appointment by the Borrowers of a replacement Administrative Borrower.

(c) Appointment of European Administrative Borrower. Each ~~U.K. European~~ Borrower, ~~German Borrower and Swiss Borrower~~ by becoming a party to this Agreement, hereby irrevocably appoints and constitutes European Administrative Borrower as its agent to request Loans and Letters of Credit pursuant to this Agreement in the name or on behalf of such Borrower. The Administrative Agent and Lenders may disburse the Loans to such bank account of European Administrative Borrower or a ~~U.K. European~~ Borrower, ~~German Borrower or Swiss Borrower~~ or otherwise make such Loans to a ~~U.K. Borrower, German Borrower or Swiss~~ ~~European~~ Borrower and provide such Letters of Credit to a ~~U.K. Borrower, German Borrower or Swiss~~ ~~European~~ Borrower as European Administrative Borrower may designate or direct, without notice to any other Borrower or Guarantor. Each ~~U.K. Borrower, German Borrower and Swiss~~ ~~European~~ Borrower hereby irrevocably appoints and constitutes European Administrative Borrower as its agent to receive statements of account and all other notices from the Agents and Lenders with respect to the Obligations or otherwise under or in connection with this Agreement and the other Loan Documents. Any notice, election, representation, warranty, agreement or undertaking by or on behalf of any other ~~European~~ Borrower by European Administrative Borrower shall be deemed for all purposes to have been made by such ~~European~~ Borrower, as the case may be, and shall be binding upon and enforceable against such ~~European~~ Borrower to the same extent as if made directly by such ~~European~~ Borrower. European Administrative Borrower hereby accepts the appointment by the ~~U.K. Borrowers, German Borrowers and Swiss~~ ~~European~~ Borrowers to act as the agent of ~~such the~~ ~~European~~ Borrowers and agrees to ensure that the disbursement of any Loans to a ~~U.K. Borrower, German Borrower or Swiss~~ ~~European~~ Borrower requested by or paid to or for the account of such ~~European~~ Borrower, or the issuance of any Letter of Credit for a ~~U.K. Borrower, German Borrower or Swiss~~ ~~European~~ Borrower hereunder, shall be paid to or for the account of such ~~European~~ Borrower. No purported termination of the appointment of European Administrative Borrower as agent as aforesaid shall be effective, except after ten (10) days' prior written notice to Administrative Agent and appointment by the ~~U.K. Borrowers, German Borrower and Swiss~~ ~~European~~ Borrowers of a replacement European Administrative Borrower.

(d) Each Borrower hereby authorizes Agent, from time to time, to charge all interest, fees, costs, expenses and other amounts and Secured Obligations payable hereunder or under any of the other Loan Documents or any Bank Product Agreement at 3:00 p.m. New York time on the Business Day immediately following the Specified Date set forth below, and the applicable Borrower shall be deemed to have requested Base Rate Revolving Loans in the amount of such Secured Obligations; provided that the Administrative Agent shall have made a report (which may be an online report) available to Administrative Borrower with respect thereto prior to such Specified Date. "Specified Date" shall mean (i) with respect to interest, fees, or other recurring charges, the date on which such amounts are due and payable hereunder, and (ii) with respect to other charges and expenses, the first Business Day of each month. The proceeds of such Revolving Loans shall be disbursed as direct payment of the relevant Secured Obligation.

SECTION 2.04 Evidence of Debt.

(a) Promise to Repay. Each U.S. Borrower, jointly and severally, hereby unconditionally promises to pay on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender (or, in the case of U.S. Swingline Loans, the U.S. Swingline Lender in accordance with Section 2.17(a)), the then unpaid principal amount of each U.S. Revolving Loan of such Revolving Lender made to any U.S. Borrower. The ~~Parent~~ Belgian Borrower hereby unconditionally promises to pay on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender, the then unpaid principal amount of each Belgian Revolving Loan of such Revolving Lender made to the Belgian Borrower. The Canadian Borrower hereby unconditionally promises to pay on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender, the then unpaid principal amount of each U.S. Revolving Loan of such Revolving Lender made to the ~~Parent~~ Canadian Borrower. ~~The~~ Each Swiss Borrower hereby unconditionally promises to pay (i) on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender, the then unpaid principal amount of each Swiss Revolving Loan of such Revolving Lender made to it and (ii) on the earlier of the Maturity Date and the last day of the Interest Period for such Loan, to the European Swingline Lender, the then unpaid principal amount of each European Swingline Loan made to it. ~~The~~ Each German Borrower hereby unconditionally promises to pay (i) on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender, the then unpaid principal amount of each German Revolving Loan of such Revolving Lender made to it and (ii) on the earlier of the Maturity Date and the last day of the Interest Period for such Loan, to the European Swingline Lender, the then unpaid principal amount of each European Swingline Loan made to it. ~~The~~ Each U.K. Borrower hereby unconditionally promises to pay (i) on the Maturity Date to the Administrative Agent, for the account of each applicable Revolving Lender, the then unpaid principal amount of each U.K. Revolving Loan of such Revolving Lender made to it and (ii) on the earlier of the Maturity Date and the last day of the Interest Period for such Loan, to the European Swingline Lender, the then unpaid principal amount of each European Swingline Loan made to it. All payments or repayments of Loans made

pursuant to this Section 2.04(a), shall be made in the Approved Currency in which such Loan is denominated.

(b) Lender and Administrative Agent Records. Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the Indebtedness of each Borrower to such Lender resulting from each Loan made by such Lender from time to time, including the amounts of principal and interest payable and paid to such Lender from time to time under this Agreement. The Administrative Agent shall maintain accounts in which it will record (i) the amount and Approved Currency of each Loan made hereunder, the Borrower or Borrowers to which such Loan is made, the Type, Class and Sub-Class thereof and the Interest Period applicable thereto; (ii) the amount of any principal or interest due and payable or to become due and payable from each Borrower to each Lender hereunder; and (iii) the amount of any sum received by the Administrative Agent hereunder for the account of the Lenders and each Lender's share thereof. The entries made in the accounts maintained pursuant to this paragraph shall be prima facie evidence of the existence and amounts of the obligations therein recorded as well as the Borrower or Borrowers which received such Loans or Letters of Credit; provided that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the obligations of any Borrower to repay the Loans in accordance with their terms.

(c) Promissory Notes. Any Lender by written notice to the Administrative Borrower (with a copy to the Administrative Agent) may request that Loans of any Class and Sub-Class made by it be evidenced by a promissory note. In such event, the applicable Borrower or Borrowers shall prepare, execute and deliver to such Lender one or more promissory notes payable to such Lender or its registered assigns in the form of Exhibit K-1 or K-2, as the case may be. Thereafter, the Loans evidenced by such promissory note and interest thereon shall at all times (including after assignment pursuant to Section 11.04) be represented by one or more promissory notes in such form payable to such payee or its registered assigns. If, because of fluctuations in exchange rates after the date of issuance thereof, any such Note would not be at least as great as the Dollar Equivalent of the outstanding principal amount of the Loans made by such Lender evidenced thereby at any time outstanding, such Lender may request (and in such case the applicable Borrowers shall promptly execute and deliver) a new Note in an amount equal to the Dollar Equivalent of the aggregate principal amount of such Loans of such Lender outstanding on the date of the issuance of such new Note.

SECTION 2.05 Fees.

(a) Commitment Fee. The Borrowers, jointly and severally, agree to pay to the Administrative Agent for the account of each Lender having a Revolving Commitment a commitment fee (a "**Commitment Fee**") denominated in Dollars on the actual daily amount by which the Total Revolving Commitment exceeds the Total Revolving Exposure, from and including the Closing Date to but excluding the date on which such Revolving Commitment terminates at a rate per annum equal to the Applicable Fee. Accrued Commitment Fees shall be payable in arrears (A) on the first ~~Business Day~~ calendar day of each month and (B) on the date on which such Revolving Commitment terminates. Commitment Fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day). For purposes of computing Commitment Fees with respect to Revolving Commitments, a Revolving Commitment of a Lender shall be deemed to be used to the extent of the outstanding Revolving Loans, Swingline Exposure and LC Exposure of such Lender.

(b) ~~Fee Letter-Parent~~ and Engagement Letter. The Canadian Borrower agrees to pay or to cause the applicable Borrower to pay all Fees payable pursuant to the Fee Letter and the Engagement Letter, in the amounts and on the dates set forth therein.

(c) LC and Fronting Fees. The applicable Borrower agrees to pay (i) to the Administrative Agent for the account of each Lender having a Revolving Commitment a participation fee ("**LC Participation Fee**") with respect to its participations in Letters of Credit, which shall accrue at a rate equal to the Applicable Margin from time to time used to determine the interest rate on (A) with regard to Letters of Credit denominated in Dollars, Canadian Dollars or GBP, Eurocurrency Loans, and (B) with regard to Letters of Credit denominated in euros, EURIBOR Loans, in each case pursuant to Section 2.06 on the average daily amount of such Lender's LC Exposure (excluding any portion thereof attributable to Reimbursement Obligations) during the period from and including the Closing Date to but excluding the later of the date on which such Lender's Revolving Commitment terminates and the date on which such Lender ceases to have any LC Exposure, and (ii) to the applicable Issuing Bank a fronting fee ("**Fronting Fee**"), which shall accrue at the rate of 0.125% per annum on the average daily amount of the LC Exposure of such Issuing Bank (excluding any portion thereof attributable to Reimbursement Obligations) during the period from and including the Closing Date to but excluding the later of the date of termination of the Revolving Commitments and the date on which such Issuing Bank ceases to have any LC Exposure, as well as such Issuing Bank's customary fees with respect to the issuance, amendment, renewal or extension of any Letter of Credit or processing of drawings thereunder. Accrued LC Participation Fees and Fronting Fees shall be payable in arrears (i) on the first Business Day of each month and (ii) on the date on which the Revolving Commitments terminate. Any such fees accruing after the date on which the Revolving Commitments terminate shall be payable on demand. Any other fees payable to an Issuing Bank pursuant to this paragraph shall be payable within ten (10) days after demand therefor. All LC Participation Fees and Fronting Fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day). If at any time any principal of or interest on any Loan or any fee or other amount payable by the Loan Parties hereunder has not been paid when due, whether at stated maturity, upon acceleration or otherwise, the LC Participation Fee shall be increased to a per annum rate equal to 2% plus the otherwise applicable rate with respect thereto for so long as such overdue amounts have not been paid.

(d) All Fees shall be paid on the dates due, in immediately available funds in Dollars, to the Administrative Agent for distribution, if and as appropriate, among the Lenders, except that Borrowers shall pay the Fronting Fees directly to the applicable Issuing Bank. Once paid, none of the Fees shall be refundable under any circumstances.

SECTION 2.06 Interest on Loans.

(a) Base Rate Loans. Subject to the provisions of Section 2.06(f), the Loans comprising each Base Rate Borrowing, including each U.S. Swingline Loan and each European Swingline Loan denominated in Dollars, shall bear interest at a rate per annum equal to the Base Rate plus the Applicable Margin in effect from time to time.

(b) Eurocurrency Loans. Subject to the provisions of Section 2.06(f), the Loans comprising each Eurocurrency Borrowing, including each European Swingline Loan denominated in GBP or Swiss Francs, shall bear interest at a rate per annum equal to the Adjusted LIBOR Rate for the Interest Period in effect for such Borrowing plus the Applicable Margin in effect from time to time.

(c) [intentionally omitted]. (d) [intentionally omitted].

(e) EURIBOR Loans. Subject to the provisions of Section 2.06(f), the Loans comprising each EURIBOR Borrowing, including each European Swingline Loan denominated in Euros, shall bear interest at a rate per annum equal to the Adjusted EURIBOR Rate for the Interest Period in effect for such Borrowing plus the Applicable Margin in effect from time to time.

(f) Default Rate. Notwithstanding the foregoing, during an Event of Default of the type specified in Sections 8.01(a), (b), (g) or (h), or during any other Event of Default if the Required Lenders in their discretion so elect by notice to the Administrative Agent, all Obligations shall, to the extent permitted by Applicable Law, bear interest, after as well as before judgment, at a per annum rate equal to (i) in the case of principal of or interest on any Loan, 2% plus the rate otherwise applicable to such Loan as provided in the preceding paragraphs of this Section 2.06 or (ii) in the case of any other Obligations, 2% plus the rate applicable to Base Rate Loans as provided in Section 2.06(a) (in either case, the “**Default Rate**”).

(g) Interest Payment Dates. Accrued interest on each Loan shall be payable in arrears on each Interest Payment Date for such Loan; provided that (i) interest accrued pursuant to Section 2.06(f) shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of a Base Rate Loan without a permanent reduction in Revolving Commitments), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment ~~and~~, (iii) in the event of any conversion of any EURIBOR Loan or Eurocurrency Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion, ~~(iv) accrued interest shall be payable on the date on which all or any portion of the Secured Obligations are accelerated pursuant to the terms hereof, and (v) accrued interest shall be payable on the date on which this Agreement is terminated pursuant to the terms hereof.~~

(h) Interest Calculation. All interest hereunder shall be computed on the basis of a year of 360 days, except that (i) interest computed by reference to the Base Rate shall be computed on the basis of a year of 365 days (or 366 days in a leap year), and (ii) interest computed with regard to Eurocurrency Loans by way of GBP shall be computed on the basis of a year of 365 days, and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Base Rate, Adjusted EURIBOR Rate or Adjusted LIBOR Rate shall be determined by the Administrative Agent in accordance with the provisions of this Agreement and such determination shall be conclusive absent manifest error.

(i) Currency for Payment of Interest. All interest paid or payable pursuant to this Section 2.06 shall be paid in the Approved Currency in which the Loan giving rise to such interest is denominated.

(j) Swiss Minimum Interests Rates and Payments. The various rates of interests provided for in this Agreement (including, without limitation, under this Section 2.06) are minimum interest rates.

(i) When entering into this Agreement, each party hereto has assumed that the payments required under this Agreement are not and will not become subject to Swiss Withholding Tax. Notwithstanding that the parties hereto do not anticipate that any payment will be subject to Swiss Withholding Tax, they agree that, if (A) Swiss Withholding Tax should be imposed on interest or other payments (the “**Relevant Amount**”) by a Swiss Loan Party and (B) Section 2.15 should be held unenforceable, then the applicable interest rate in relation to that interest payment shall be: (x) the interest rate which would have been applied to that interest payment (as provided for in the absence of this Section 2.06(j)); divided by (y) 1 minus the minimal permissible rate at which the relevant Tax Deduction is required to be made in view of domestic tax law and/or applicable treaties (where the rate at which the relevant Tax Deduction is required to be made is, for this purpose, expressed as a fraction of one (1)) and all references to a rate of interest under such Loan shall be construed accordingly. For this purpose, the Swiss Withholding Tax shall be calculated on the amount so recalculated.

(ii) ~~The~~ A Swiss Borrower shall not be required to make an increased payment to any specific Lender (but without prejudice to the rights of all other Lenders hereunder) under paragraph (i) above or under Section 2.15 in connection with a Swiss Withholding Tax if ~~the~~ such Swiss Borrower has breached the Ten Non-Bank Regulations and/or Twenty Non-Bank Regulations as a direct result of (A) the incorrectness of the representation made by such Lender pursuant to Section 2.21 if such Lender specified that it was a Swiss Qualifying Bank or (B) such Lender, as assignee or participant, breaching the requirements and limitations for transfers, assignments or participations pursuant to Section 11.04 or (C) if Section 2.15 does not provide for an obligation to make increased payments.

(iii) For the avoidance of doubt, ~~the~~ a Swiss ~~Borrower~~ Borrowers shall be required to make an increased payment to a specific Lender under paragraph (i) above in connection with the imposition of a Swiss Withholding Tax (A) if ~~the~~ such Swiss Borrower has breached the Ten Non-Bank Regulations and/or the Twenty Non-Bank Regulations as a result of its failure to comply with the provisions of Section 5.15 or, (B) if after an Event of Default, lack of compliance with the Ten Non-Bank Regulations and/or

the Twenty Non-Bank Regulations as a result of assignments or participation effected in accordance herewith, or (C) following a change of law or practice in relation with the Ten Non-Bank Regulations and/or the Twenty Non-Bank Regulations Swiss Withholding Tax becomes due on interest payments made by such Swiss Borrower and Section 2.15 is not enforceable.

(iv) If requested by the Administrative Agent, a Swiss Loan Party shall provide to the Administrative Agent those documents which are required by law and applicable double taxation treaties to be provided by the payer of such tax for each relevant Lender to prepare a claim for refund of Swiss Withholding Tax. In the event Swiss Withholding Tax is refunded to the Lender by the Swiss Federal Tax Administration, the relevant Lender shall forward, after deduction of costs, such amount to the Swiss Loan Party; provided, however, that (i) the relevant Swiss Loan Party has fully complied with its obligations under this Section 2.06(j); (ii) the relevant Lender may determine, in its sole discretion, consistent with the policies of such Lender, the amount of the refund attributable to Swiss Withholding Tax paid by the relevant Swiss Loan Party; (iii) nothing in this Agreement shall require the Lender to disclose any confidential information to the Swiss Loan Party (including, without limitation, its tax returns); and (iv) no Lender shall be required to pay any amounts pursuant to this Section 2.06(j)(iv) at any time during which a Default or Event of Default exists.

SECTION 2.07 Termination and Reduction of Commitments.

(a) Termination of Commitments. The Revolving Commitments, the European Swingline Commitment and the LC Commitment shall automatically terminate on the Maturity Date.

(b) Optional Terminations and Reductions. At its option, Administrative Borrower may at any time terminate, or from time to time permanently reduce, the Commitments of any Class (for the purposes of this Section 2.07, treating the Specified Incremental Commitments as a separate Class prior to the Specified Incremental Commitment Availability Date); provided that (i) each reduction of the Commitments of any Class shall be in an amount that is an integral multiple of \$1,000,000 and not less than \$5,000,000 ~~and~~, (ii) the Revolving Commitments shall not be terminated or reduced if, after giving effect to any concurrent prepayment of the Revolving Loans in accordance with Section 2.10, the aggregate amount of Revolving Exposure would exceed the aggregate amount of Revolving Commitments, or the Total Revolving Exposure would exceed the Adjusted Total Revolving Commitment. In connection with any reduction in the Commitments prior to the Maturity Date, if any Loan Party or any of its Subsidiaries owns any Margin Stock, Borrowers shall deliver to each Agent an updated Form U-1 (with sufficient additional originals thereof for each Lender and each Issuing Bank), duly executed and delivered by the Borrowers, together with such other documentation as each Agent shall reasonably request, in order to enable each Agent, the Lenders, and the Issuing Banks to comply with any of the requirements under Regulation T, Regulation U or Regulation X.

(c) Borrower Notice. Administrative Borrower shall notify the Administrative Agent in writing of any election to terminate or reduce the Commitments under Section 2.07(b) at least three (3) Business Days prior to the effective date of such termination or reduction, specifying such election and the effective date thereof. Promptly following receipt of any notice, the Administrative Agent shall advise the Lenders of the contents thereof. Each notice delivered by Administrative Borrower pursuant to this Section shall be irrevocable; provided that a notice of termination of the Commitments delivered by Administrative Borrower may state that such notice is conditioned upon the effectiveness of other credit facilities, in which case such notice may be (subject to payment of any amount pursuant to Section 2.13) revoked by Administrative Borrower (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination or reduction of the Commitments of any Class shall be permanent. Each reduction of the Commitments of any Class shall be made ratably among the Lenders in accordance with their respective Commitments of such Class.

SECTION 2.08 Interest Elections.

(a) Generally. Each Borrowing initially shall be of the Type specified in the applicable Borrowing Request and, in the case of a EURIBOR Borrowing or Eurocurrency Borrowing, shall have an initial Interest Period as specified in such Borrowing Request. Thereafter, Administrative Borrower may elect to convert such Borrowing to a different Type (in the case of Dollar Denominated Loans made to U.S. Borrowers or to ~~Parent~~the Canadian Borrower, to a Base Rate Borrowing or a Eurocurrency Borrowing) or to rollover or continue such Borrowing and, in the case of a EURIBOR Borrowing or Eurocurrency Borrowing, may elect Interest Periods therefor, all as provided in this Section. Borrowings consisting of Alternate Currency Revolving Loans may not be converted to a different Type. Administrative Borrower may elect different options with respect to different portions (not less than the Minimum Currency Threshold) of the affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Borrowing. Notwithstanding anything to the contrary, Borrowers shall not be entitled to request any conversion, rollover or continuation that, if made, would result in more than eight Eurocurrency Borrowings in Dollars, five Eurocurrency Borrowings in GBP, or eight EURIBOR Borrowings outstanding hereunder at any one time. This Section shall not apply to Swingline Loans, which may not be converted or continued.

(b) Interest Election Notice. To make an election pursuant to this Section 2.08, Administrative Borrower shall deliver, by hand delivery or telecopier, a duly completed and executed Interest Election Request to the Administrative Agent not later than the time that a Borrowing Request would be required under Section 2.03 if Administrative Borrower were requesting a Borrowing of the Type resulting from

such election to be made on the effective date of such election. Each Interest Election Request shall be irrevocable. Each Interest Election Request shall specify the following information in compliance with Section 2.02:

- (i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, or if outstanding Borrowings are being combined, allocation to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (v) below shall be specified for each resulting Borrowing);
- (ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;
- (iii) in the case of Dollar Denominated Loans made to U.S. Borrowers or to ~~Parent~~the Canadian Borrower, whether such Borrowing is to be a Base Rate Borrowing or a Eurocurrency Borrowing;
- (iv) [intentionally omitted];
- (v) if the resulting Borrowing is a EURIBOR Borrowing or a Eurocurrency Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated, as applicable, by the definition of the term "EURIBOR Interest Period" or "Eurocurrency Interest Period"; and
- (vi) in the case of a Borrowing consisting of Alternate Currency Revolving Loans, the Alternate Currency of such Borrowing.

If any such Interest Election Request requests a EURIBOR Borrowing or Eurocurrency Borrowing but does not specify an Interest Period, then Borrowers shall be deemed to have selected an Interest Period of one month's duration.

Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender of the details thereof and of such Lender's portion of each resulting Borrowing.

(c) Automatic Conversion to Base Rate Borrowing. If an Interest Election Request with respect to a Eurocurrency Borrowing made to U.S. Borrowers or to ~~Parent~~the Canadian Borrower in Dollars is not timely delivered prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period such Borrowing shall be converted to a Base Rate Borrowing. EURIBOR Borrowings and Eurocurrency Borrowings denominated in an Alternate Currency, and Eurocurrency Borrowings made to the Belgian Borrower, any Swiss Borrower, any German Borrower or any U.K. Borrower and denominated in Dollars, shall not be converted to a Base Rate Borrowing, but shall be continued as Loans of the same Type with a one month Interest Period. Notwithstanding any contrary provision hereof, if an Event of Default has occurred and is continuing, the Administrative Agent or the Required Lenders may require, by notice to Administrative Borrower, that (i) no outstanding Borrowing may be converted to or continued as a EURIBOR Borrowing or Eurocurrency Borrowing and (ii) unless repaid, each Eurocurrency Borrowing (other than a Borrowing of Alternate Currency Loans or a Eurocurrency Borrowing made to the Belgian Borrower any Swiss Borrower, any German Borrower or any U.K. Borrower and denominated in Dollars) shall be converted to a Base Rate Borrowing at the end of the Interest Period applicable thereto.

SECTION 2.09 [intentionally omitted].

SECTION 2.10 Optional and Mandatory Prepayments of Loans.

(a) Optional Prepayments. Borrowers shall have the right at any time and from time to time to prepay any Borrowing, in whole or in part, subject to the requirements of this Section 2.10 and subject to the provisions of Section 9.01(e); provided that each partial prepayment shall be in a principal amount that is not less than (and in integral amounts consistent with) the Minimum Currency Threshold or, if less, the outstanding principal amount of such Borrowing.

(b) Certain Revolving Loan Prepayments.

(i) In the event of the termination of all the Revolving Commitments, each Borrower shall, on the date of such termination, repay or prepay all its outstanding Borrowings and all its outstanding Swingline Loans and replace all outstanding Letters of Credit or cash collateralize all its outstanding Letters of Credit in accordance with the procedures set forth in Section 2.18.

(ii) [intentionally omitted]. (iii) [intentionally omitted].

(iv) In the event of any partial reduction of the Revolving Commitments, then (x) at or prior to the effective date of such reduction, the Administrative Agent shall notify Administrative Borrower and the applicable Revolving Lenders of the Total Revolving Exposure after giving effect thereto and (y) if the Total Revolving Exposure would exceed the Adjusted Total Revolving Commitment less Availability Reserves after giving effect to such reduction, each applicable Borrower shall, on the date of such reduction, act in accordance with Section 2.10(b)(vi) below.

(v) [intentionally omitted].

(vi) In the event that the Total Revolving Exposure at any time exceeds the Adjusted Total Revolving Commitment less Availability Reserves then in effect (including on any date on which Dollar Equivalents are determined pursuant to the definition thereof), each applicable Borrower shall, without notice or demand, immediately *first*, repay or prepay its Borrowings and *second*, replace its outstanding Letters of Credit or cash collateralize its outstanding Letters of Credit in accordance with the procedures set forth in Section 2.18, in an aggregate amount sufficient to eliminate such excess.

(vii) [intentionally omitted].

(viii) In the event that (A) the aggregate LC Exposure of all Issuing Banks exceeds the aggregate LC Commitments of all Issuing Banks then in effect or (B) the LC Exposure of any Issuing Bank exceeds the LC Commitment of such Issuing Bank then in effect (including on any date on which Dollar Equivalents are determined pursuant to the definition thereof), each applicable Borrower shall, without notice or demand, immediately replace its outstanding Letters of Credit or cash collateralize its outstanding Letters of Credit in accordance with the procedures set forth in Section 2.18, in an aggregate amount sufficient to eliminate such excess.

(ix) ~~In the event that (A) the Total Revolving Exposure exceeds the Total Borrowing Base then in effect, (B) the Total Adjusted Revolving Exposure (German) exceeds the Total Adjusted Borrowing Base (German) then in effect, (C) the Total Adjusted Revolving Exposure (Swiss) exceeds the Total Adjusted Borrowing Base (Swiss) then in effect, or (D) the Total Adjusted Revolving Exposure exceeds the Total Adjusted Borrowing Base then in effect, Except as otherwise provided in clauses (iv), (vi) or (viii) above, in the event that, at any time, one or more of the Funding Conditions (or Swingline Conditions, solely in the case of a Swingline Loan) would not be satisfied if such conditions were required to be satisfied at such time, then~~ each applicable Borrower shall, without notice or demand, immediately *first*, repay or prepay its Borrowings, and *second*, replace its outstanding Letters of Credit or cash collateralize its outstanding Letters of Credit in accordance with the procedures set forth in Section 2.18, in an aggregate amount ~~sufficient to eliminate such excesses equal to the amount required to cause all Funding Conditions and, if applicable, Swingline Conditions to be satisfied at such time (or, in the case of cash collateralized Letters of Credit, 105% of such amount);~~ provided that, to the extent that the failure to satisfy such excess conditions results solely by reason of a change in exchange rates between the currencies in which such amounts were funded and Dollars, unless a Default or an Event of Default has occurred and is continuing, no Borrower shall be required to make such repayment, replacement or cash collateralization unless the amount of such excess is greater than 5% of the Total Borrowing Base, Total Adjusted Borrowing Base (German), Total Adjusted Borrowing Base (Swiss) or Total Adjusted Borrowing Base, as the case may be under this clause (ix) unless (A) such amount exceeds any commitment or sublimit applicable thereto, or (B) the amount required to cause all Funding Conditions and, if applicable, Swingline Conditions to be satisfied at such time exceeds 5% of the sum of the Borrowing Bases applicable to such Funding Condition or, if applicable, Swingline Condition (in which event under clauses (A) and (B) above, the applicable Borrowers shall make such repayments, replacements or cash collateralization so as to eliminate such excess in its entirety).

(x) [intentionally omitted].

(xi) In the event an Activation Notice has been given (as contemplated by Section 9.01), Borrowers shall pay all proceeds of Collateral (other than proceeds of Pari Passu Priority Collateral) into the Collection Account, for application in accordance with Section 9.01(e).

(c) Asset Sales. Not later than three (3) Business Days following the receipt of any Net Cash Proceeds of any Asset Sale of Revolving Credit Priority Collateral by any Loan Party (i) occurring during the existence of any Event of Default or (ii) at any time after the occurrence of a Cash Dominion Trigger Event and prior to the subsequent occurrence of a Cash Dominion Recovery Event, Borrowers shall make (in addition to any prepayments required by Section 2.10(b) (which shall be made regardless of whether any prepayment is required under this paragraph (c)), prepayments in accordance with Section 2.10(h) and (i) in an aggregate amount equal to 100% of such Net Cash Proceeds; provided that no such prepayment shall be required under this Section 2.10(c) with respect to (A) the disposition of property which constitutes a Casualty Event (in which event Section 2.10(f) shall apply), or (B) Asset Sales for fair market value resulting in less than \$5,000,000 in Net Cash Proceeds in any fiscal year.

(d) [intentionally omitted]. (e) [intentionally omitted].

(f) Casualty Events. Not later than three (3) Business Days following the receipt of any Net Cash Proceeds from a Casualty Event in respect of Revolving Credit Priority Collateral by any Loan Party during the occurrence of an Event of Default or at any time after the occurrence of a Cash Dominion Trigger Event and prior to the subsequent occurrence of a Cash Dominion Recovery Event, Borrowers shall make (in addition to any prepayments required by Section 2.10(b) (which shall be made regardless of whether any prepayment is required under this paragraph (f)), prepayments in accordance with Section 2.10(h) and (i) in an aggregate amount equal to 100% of such Net Cash Proceeds; provided that no such prepayment shall be required under this Section 2.10(f) with respect to Casualty Events resulting in less than \$5,000,000 in Net Cash Proceeds in any fiscal year.

(g) [intentionally omitted].

(h) Application of Prepayments. (i) Prior to any optional or mandatory prepayment hereunder, Administrative Borrower shall select the Borrowing or Borrowings to be prepaid and shall specify such selection in the notice of such prepayment pursuant to Section 2.10(i), subject to the provisions of this Section 2.10(h), provided that after an Activation Notice has been delivered, Section 9.01(e) shall apply, provided, further, that notwithstanding the foregoing, after an Event of Default has occurred and is continuing or after the acceleration of the Obligations, Section 8.03 shall apply. Any mandatory prepayment shall be made

(ii) Amounts to be applied pursuant to this Section 2.10 to the prepayment of Revolving Loans by a Borrower shall be applied, as applicable, first to reduce outstanding U.S. Swingline Loans and European Swingline Loans denominated in Dollars, and then to reduce other outstanding Base Rate Loans of that Borrower. Any amounts remaining after each such application shall be applied to prepay EURIBOR Loans or Eurocurrency Loans, as applicable, of that Borrower. Notwithstanding the foregoing, if the amount of any prepayment of Loans required under this Section 2.10 shall be in excess of the amount of the Base Rate Loans (including U.S. Swingline Loans) at the time outstanding (an “**Excess Amount**”), only the portion of the amount of such prepayment as is equal to the amount of such outstanding Base Rate Loans (including U.S. Swingline Loans and European Swingline Loans denominated in Dollars) shall be immediately prepaid and, at the election of Administrative Borrower, the

Excess Amount shall be either (A) deposited in an escrow account on terms satisfactory to the Administrative Agent and applied to the prepayment of EURIBOR Loans or Eurocurrency Loans on the last day of the then next-expiring Interest Period for EURIBOR Loans or Eurocurrency Loans; provided that (i) interest in respect of such Excess Amount shall continue to accrue thereon at the rate provided hereunder for the Loans which such Excess Amount is intended to repay until such Excess Amount shall have been used in full to repay such Loans and (ii) at any time while an Event of Default has occurred and is continuing, the Administrative Agent may, and upon written direction from the Required Lenders shall, apply any or all proceeds then on deposit to the payment of such Loans in an amount equal to such Excess Amount or (B) prepaid immediately, together with any amounts owing to the Lenders under Section 2.13.

(i) Notice of Prepayment. Administrative Borrower or European Administrative Borrower, as applicable, shall notify the Administrative Agent (and, in the case of prepayment of a Swingline Loan, the Swingline Lender) by written notice of any prepayment hereunder (i) in the case of prepayment of a Eurocurrency Borrowing (other than a Eurocurrency Borrowing made in GBP), not later than 12:00 noon, New York time, three (3) Business Days before the date of prepayment, (ii) in the case of prepayment of a EURIBOR Borrowing, or a Eurocurrency Borrowing made in GBP (in each case other than a European Swingline Loan), not later than 11:00 a.m., London time, three (3) Business Days before the date of prepayment, (iii) in the case of prepayment of a Base Rate Borrowing, not later than 12:00 noon, New York time, one (1) Business Day before the date of prepayment, (iv) in the case of prepayment of a U.S. Swingline Loan, not later than 12:00 noon, New York time, on the date of prepayment, (v) in the case of prepayment of a European Swingline Loan (other than a European Swingline Loan made in Swiss francs), not later than 11:00 a.m., London time, on the date of prepayment, and (vi) in the case of prepayment of a European Swingline Loan made in Swiss francs, not later than 11:00 a.m., London time, one (1) Business Day before the date of prepayment. Each such notice shall be irrevocable; provided that, if a notice of prepayment is given in connection with a conditional notice of termination of the Commitments as contemplated by Section 2.07, then such notice of prepayment may be revoked if such termination is revoked in accordance with Section 2.07. Each such notice shall specify the prepayment date, the principal amount of each Borrowing or portion thereof to be prepaid and, in the case of a mandatory prepayment, a reasonably detailed calculation of the amount of such prepayment. Promptly following receipt of any such notice (other than a notice relating solely to Swingline Loans), the Administrative Agent shall advise the Lenders of the contents thereof. Each partial prepayment of any Borrowing shall be in an amount that would be permitted in the case of a Credit Extension of the same Type as provided in Section 2.02, except as necessary to apply fully the required amount of a mandatory prepayment. Each prepayment of a Borrowing shall be applied ratably to the Loans included in the prepaid Borrowing and otherwise in accordance with this Section 2.10. Prepayments shall be accompanied by accrued interest to the extent required by Section 2.06.

(j) Foreign Asset Sales. Notwithstanding any other provisions of Section 2.10(c) or (f), (i) to the extent that any of or all of the Net Cash Proceeds of any Asset Sale or Casualty Event subject to such sections in respect of Revolving Priority Collateral owned by a Loan Party organized in a Non-Principal Jurisdiction are received by such Loan Party (a “Foreign Asset Sale”) and such Net Cash Proceeds are prohibited, restricted or otherwise delayed (each, a “Repatriation Limitation”) by applicable local law from being repatriated to the United States or Canada, the portion of such Net Cash Proceeds so affected will not be required to be applied to repay Revolving Loans at the times provided in this Section 2.10 but may be retained by the applicable Loan Party so long as such Repatriation Limitation exists (provided, that such Loan Party shall use its commercially reasonable efforts to overcome any Repatriation Limitation) and once such Repatriation Limitation no longer exists, such Loan Party shall promptly repatriate an amount equal to such Net Cash Proceeds to the applicable Borrower which shall promptly (and in any event not later than five Business Days after such repatriation) apply such amount to the repayment of the Revolving Loans pursuant to this Section 2.10 and (ii) to the extent that such Borrower has reasonably determined in good faith that repatriation of any of or all of such Net Cash Proceeds of any Asset Sale or Casualty Event subject to Section 2.10(c) or (e) in respect of Revolving Priority Collateral owned by a Loan Party organized in a Non-Principal Jurisdiction received by such Loan Party would have a material adverse tax cost consequence with respect to such Net Cash Proceeds for such Loan Party, the Net Cash Proceeds so affected may be retained by the applicable Loan Party.

SECTION 2.11 Alternate Rate of Interest.

(a) If prior to the commencement of any Interest Period for a EURIBOR Borrowing or Eurocurrency Borrowing:

(i) the Administrative Agent determines (which determination shall be final and conclusive absent manifest error) that adequate and reasonable means do not exist for ascertaining the Adjusted EURIBOR Rate or Adjusted LIBOR Rate for such Interest Period (including because the EURIBOR Rate or the LIBOR Rate is not available or published on a current basis or the circumstances set forth in Section 2.12(e) have occurred) or that any Alternate Currency is not available to the Lenders in sufficient amounts to fund any Borrowing consisting of Alternate Currency Revolving Loans; or

(ii) the Administrative Agent is advised in writing by the Required Lenders

that the Adjusted EURIBOR Rate or Adjusted LIBOR Rate for such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for such Interest Period (including because the EURIBOR Rate or

the LIBOR Rate is not available or published on a current basis or the circumstances set forth in Section 2.12(e) have occurred);

then the Administrative Agent shall give written notice thereof to Administrative Borrower and the Lenders as promptly as practicable thereafter and, until the Administrative Agent notifies Administrative Borrower and the Lenders that the circumstances giving rise to such notice no longer exist, ~~(ix)~~ any Interest Election Request that requests the conversion of any Borrowing to, or continuation of any Borrowing as, a EURIBOR Borrowing or Eurocurrency Borrowing, as applicable, shall be ineffective and ~~(ix)~~ if any Borrowing Request requests a Eurocurrency Borrowing in Dollars, such Borrowing shall be made as a Base Rate Borrowing, and Borrowing Requests for any affected Alternate Currency Revolving Loans or European Swingline Loans shall not be effective.

(b) If at any time the Administrative Agent determines (which determination shall be final and conclusive absent manifest error), or the Required Lenders notify the Administrative Agent that the Required Lenders have determined, that (i) the circumstances set forth in clause (a) have arisen and such circumstances are unlikely to be temporary; or (ii) the administrator of the EURIBOR Rate or the LIBOR Rate or a Governmental Authority has made a public statement identifying a specific date after which the EURIBOR Rate or the LIBOR Rate shall no longer be made available or used for determining the interest rate of loans (such specific date, the “Scheduled Unavailability Date”), then the Administrative Agent and the Administrative Borrower shall endeavor to establish an alternate rate of interest to the EURIBOR Rate and/or the LIBOR Rate, as applicable, and agree on the margin applicable thereto, giving due consideration to any selection, endorsement or recommendation of a replacement rate and/or replacement spread or the mechanism for determining such a rate or spread by the relevant Governmental Authority in effect at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest, the margin applicable thereto and such other related changes to this Agreement as may be applicable; provided that such amendment shall provide that if such alternate rate of interest shall be less than zero, such rate shall be deemed to be zero for purposes of this Agreement. Notwithstanding anything to the contrary in this Agreement or any other Loan Document, including Section 11.02, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within ten (10) Business Days of the date a copy of such amendment is provided to the Lenders, written notice from the Required Lenders stating that such Required Lenders object to such amendment. If no such alternate rate has been determined and the circumstances under clause (b)(i) above exist or the Scheduled Unavailability Date has occurred (as applicable), the Administrative Agent will promptly so notify the Administrative Borrower and each Lender, and thereafter until execution of an amendment to implement an alternative rate in accordance with the foregoing, (x) the obligation of the Lenders to make or maintain EURIBOR Loans and/or Eurocurrency Loans, as applicable, shall be suspended, and (y) the EURIBOR Rate and/or LIBOR Rate component shall no longer be utilized in determining any other rate under this Agreement or any other Loan Document (including the Base Rate). Upon receipt of such notice, the Administrative Borrower may revoke any pending request for a Loan of, conversion to or continuation of EURIBOR Loans or Eurocurrency Loans (to the extent of the affected EURIBOR Loans, Eurocurrency Loans or Interest Periods) or, failing that, (1) in the case of Dollar Denominated Loans, will be deemed to have converted such request into a request for a Borrowing of Base Rate Loans (subject to the foregoing clause (y)) in the amount specified therein, or (2) in the case of any other Loans, such Loans under this clause (2) the applicable Borrower shall repay all such Loans on the earlier of the last day of the then current Interest Period therefor and the last day of any applicable grace period permitted by Applicable Law.

SECTION 2.12 Yield Protection; Change in Law Generally.

(a) Increased Costs Generally. If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit, liquidity, compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended or participated in, by any Lender (except any reserve requirement reflected in the Adjusted LIBOR Rate or the Adjusted EURIBOR Rate, as applicable) or any Issuing Bank; or

(ii) impose on any Lender or any Issuing Bank or the interbank market any other condition, cost or expense affecting this Agreement or EURIBOR Loans or Eurocurrency Loans made by such Lender or any Letter of Credit or participation therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making, converting to, continuing or maintaining any EURIBOR Loan or any Eurocurrency Loan (or of maintaining its obligation to make any such Loan), or to increase the cost to such Lender, such Issuing Bank or such Lender's or such Issuing Bank's holding company, if any, of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender or such Issuing Bank hereunder (whether of principal, interest or any other amount), then, upon request of such Lender or such Issuing Bank, Borrowers will pay to such Lender or such Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or such Issuing Bank, as the case may be, for such additional costs incurred or reduction suffered. In addition, to the extent not already addressed under the definition of Adjusted EURIBOR Rate or Adjusted LIBOR Rate, the Adjusted EURIBOR Rate and the Adjusted LIBOR Rate may be adjusted by the Administrative Agent with respect to any Lender or any Issuing Bank on a prospective basis to take into account any additional or increased costs to such Lender or Issuing Bank of maintaining or obtaining any eurodollar deposits or increased costs (other than

Taxes), in each case, due to changes in applicable law occurring subsequent to the commencement of the then applicable Interest Period, including any Changes in Law and changes in the reserve requirements imposed by the Board of Governors, which additional or increased costs would increase the cost of funding or maintaining loans bearing interest at the EURIBOR Rate or LIBOR Rate. In any such event, the affected Lender or Issuing Bank shall give the Administrative Borrower and the Administrative Agent notice of such a determination and adjustment and the Administrative Agent promptly shall transmit the notice to each other Lender and Issuing Bank and, upon its receipt of the notice from the affected Lender or Issuing Bank, Borrowers may, by notice to such affected Lender or Issuing Bank (A) require such Lender or Issuing Bank to furnish to the Administrative Borrower a statement setting forth in reasonable detail the basis for adjusting such EURIBOR Rate or LIBOR Rate and the method for determining the amount of such adjustment, or (B) repay the EURIBOR Rate Loans and LIBOR Rate Loans of such Lender or replace the applicable Letter of Credit with respect to which such adjustment is made (together with any amounts due under Section 2.13).

(b) Capital Requirements. If any Lender or any Issuing Bank determines (in good faith, but in its sole absolute discretion) that any Change in Law affecting such Lender or such Issuing Bank or any lending office of such Lender or such Lender's or such Issuing Bank's holding company, if any, regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or such Issuing Bank's capital or liquidity or on the capital or liquidity of such Lender's or such Issuing Bank's holding company, if any, as a consequence of this Agreement, the Commitments of such Lender or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by such Issuing Bank, to a level below that which such Lender or such Issuing Bank or such Lender's or such Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or such Issuing Bank's policies and the policies of such Lender's or such Issuing Bank's holding company with respect to capital adequacy or liquidity), then from time to time Borrowers will pay to such Lender or such Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or such Issuing Bank or such Lender's or such Issuing Bank's holding company for any such reduction suffered.

(c) Certificates for Reimbursement. A certificate of a Lender or an Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or such Issuing Bank or its holding company, as the case may be, as specified in paragraph (a) or (b) of this Section 2.12 and delivered to Administrative Borrower shall be conclusive absent manifest error. Borrowers shall pay such Lender or such Issuing Bank, as the case may be, the amount shown as due on any such certificate within ten (10) Business Days after receipt thereof.

(d) Delay in Requests. Failure or delay on the part of any Lender or any Issuing Bank to demand compensation pursuant to this Section 2.12 shall not constitute a waiver of such Lender's or such Issuing Bank's right to demand such compensation; provided that Borrowers shall not be required to compensate a Lender or an Issuing Bank pursuant to this Section for any increased costs incurred or reductions suffered more than nine months prior to the date that such Lender or such Issuing Bank, as the case may be, notifies Administrative Borrower of the Change in Law giving rise to such increased costs or reductions and of such Lender's or such Issuing Bank's intention to claim compensation therefor (except that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the ninemonth period referred to above shall be extended to include the period of retroactive effect thereof).

(e) Change in Legality Generally. Notwithstanding any other provision of this Agreement, if, in the reasonable opinion of any Lender, any Change in Law or market conditions shall make it unlawful or impractical for ~~any~~such Lender to make or maintain any Eurocurrency Loan or any EURIBOR Loan, or to give effect to its obligations as contemplated hereby with respect to any Eurocurrency Loan or any EURIBOR Loan, then,

upon written notice by such Lender to Administrative Borrower and the Administrative Agent:

(i) the Commitments of such Lender (if any) to fund the affected Type of Loan shall immediately terminate;

(ii) in the case of Dollar Denominated Loans, (x) such Lender may declare that Eurocurrency Loans will not thereafter (for the duration of such unlawfulness) be continued for additional Interest Periods and Base Rate Loans will not thereafter (for such duration) be converted into Eurocurrency Loans, whereupon any request to convert a Base Rate Borrowing to a Eurocurrency Borrowing or to continue a Eurocurrency Borrowing for an additional Interest Period shall, as to such Lender only, be deemed a request to continue a Base Rate Loan as such, or to convert a Eurocurrency Loan into a Base Rate Loan, as the case may be, unless such declaration shall be subsequently withdrawn and (y) all such outstanding Eurocurrency Loans made by such Lender shall be automatically converted to Base Rate Loans on the last day of the then current Interest Period therefor or, if earlier, on the date specified by such Lender in such notice (which date shall be no earlier than the last day of any applicable grace period permitted by Applicable Law); and

(iii) in the case of Eurocurrency Loans that are GBP Denominated Loans or Swiss Franc Denominated Loans, or Dollar Denominated Loans of any Swiss Borrower or any U.K. Borrower (other than European Swingline Loans denominated in Dollars), and in the case of EURIBOR Loans, the applicable Borrower shall repay all such outstanding Eurocurrency Loans or EURIBOR Loans, as the case may be, of such Lender on the last day of the then current Interest Period therefor or, if earlier, on the date specified by such Lender in such notice (which date shall be no earlier than the last day of any applicable grace period permitted by Applicable Law).

(f) Change in Legality in Relation to Issuing Bank. Notwithstanding any other provision of this Agreement, if, in the reasonable opinion of any Issuing Bank, any Change in Law or market condition shall make it unlawful or impractical for ~~any~~such Issuing Bank to issue or allow to remain outstanding any Letter of Credit, then, by written notice to Administrative Borrower and the Administrative Agent:

- (i) such Issuing Bank shall no longer be obligated to issue any Letters of Credit; and
- (ii) each Borrower shall use its commercially reasonable best efforts to procure the release of each outstanding Letter of Credit issued by such Issuing Bank.

(g) **Increased Tax Costs.** If any Change in Law shall subject any Lender or any Issuing Bank to any (i) Tax of any kind whatsoever with respect to this Agreement, any Letter of Credit, any participation in a Letter of Credit or any Loan made by it, or change the basis of taxation of payments to such Lender or such Issuing Bank in respect thereof, or (ii) Tax imposed on it that is specially (but not necessarily exclusively) applicable to lenders such as such Lender as a result of the general extent and/or nature of their activities, assets, liabilities, leverage, other exposures to risk, or other similar factors, including but not limited to the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, regulations, guidelines or directives thereunder or issued in connection therewith, any bank levy (being a Tax similar to the United Kingdom Tax known as the “bank levy”) in such form as it may be imposed and as amended or reenacted, and similar legislation (except, in each case of the foregoing clauses (i) and (ii), for Indemnified Taxes or Other Taxes covered by [Section 2.15](#) and the imposition of, or any change in the rate of, any Excluded Tax payable by such Lender; provided, however, for purposes of this [Section 2.12\(g\)](#), a franchise tax in lieu of or in substitute of net income taxes shall be treated as an Excluded Tax only if such franchise tax in lieu of or in substitute of net income taxes is imposed by a state, city or political subdivision of a state, in each case in the United States, for the privilege of being organized or chartered in, or doing business in, such state, city or political subdivision of such state or city in the United States), and the result of any of the foregoing shall be to increase the cost to such Lender such Issuing Bank of making, converting to, continuing or maintaining any Loan (or of maintaining its obligation to make any such Loan), or to increase the cost to such Lender, such Issuing Bank or such Lender’s or such Issuing Bank’s holding company, if any, of participating in, issuing or maintaining any Letter of Credit (or of maintaining its obligation to participate in or to issue any Letter of Credit), or to reduce the amount of any sum received or receivable by such Lender or such Issuing Bank hereunder (whether of principal, interest or any other amount), then, upon request of such Lender or such Issuing Bank, Borrowers will pay to such Lender or such Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or such Issuing Bank, as the case may be, for such additional costs incurred or reduction suffered.

SECTION 2.13 Breakage Payments. In the event of (a) the payment or prepayment, whether optional or mandatory, of any principal of any Eurocurrency Loan or EURIBOR Loan earlier than the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (b) the conversion of any Eurocurrency Loan or EURIBOR Loan earlier than the last day of the Interest Period applicable thereto, (c) the failure to borrow, convert, continue or prepay any Revolving Loan on the date specified in any notice delivered pursuant hereto (whether or not such notice was validly revoked pursuant to [Section 2.07\(c\)](#)) or (d) the assignment of any Eurocurrency Loan or EURIBOR Loan earlier than the last day of the Interest Period applicable thereto as a result of a request by Administrative Borrower pursuant to [Section 2.16\(c\)](#), then, in any such event, the applicable Borrower shall compensate each Lender for the loss, cost and expense attributable to such event. In the case of a Eurocurrency Loan or EURIBOR Loan, such loss, cost or expense to any Lender shall be deemed to include an amount determined by such Lender to be the excess, if any, of (i) the amount of interest which would have accrued on the principal amount of such Loan had such event not occurred, at the Adjusted LIBOR Rate or the Adjusted EURIBOR Rate that would have been applicable to such Loan, for the period from the date of such event to the last day of the then current Interest Period therefor (or, in the case of a failure to borrow, convert or continue, for the period that would have been the Interest Period for such Loan) (excluding, however, the Applicable Margin included therein, if any), over (ii) the amount of interest which would accrue on such principal amount for such period at the interest rate which such Lender would bid were it to bid, at the commencement of such period, for deposits of a comparable currency, amount and period from other banks in the applicable interbank market. A certificate of any Lender setting forth in reasonable detail any amount or amounts that such Lender is entitled to receive pursuant to this [Section 2.13](#) shall be delivered to Administrative Borrower (with a copy to the Administrative Agent) and shall be conclusive and binding absent manifest error. Failure or delay on the part of any Lender to demand compensation pursuant to this [Section 2.13](#) shall not constitute a waiver of such Lender’s right to demand such compensation; provided that Borrowers shall not be required to compensate a Lender pursuant to this [Section](#) for any loss, cost or expense suffered in respect of any event occurring more than three months prior to the date that such Lender delivers such certificate in accordance with the prior sentence. The applicable Borrower shall pay such Lender the amount shown as due on any such certificate within five (5) days after receipt thereof. Anything to the contrary contained herein notwithstanding, neither any Agent, nor any Lender, nor any of their Participants, is required actually to acquire eurodollar deposits to fund or otherwise match fund any Obligation as to which interest accrues at the LIBOR Rate or the EURIBOR Rate.

SECTION 2.14 Payments Generally; Pro Rata Treatment; Sharing of Setoffs.

(a) **Payments Generally.** Each Loan Party shall make each payment required to be made by it hereunder or under any other Loan Document (whether of principal, interest, fees or Reimbursement Obligations, or of amounts payable under [Section 2.12](#), [Section 2.13](#), [Section 2.15](#), [Section 2.16](#), [Section 2.22](#) or [Section 11.03](#), or otherwise) on or before the time expressly required hereunder or under such other Loan Document for such payment (or, if no such time is expressly required, prior to (i) in the case of payments with respect to Revolving Loans made in GBP or Euros, 12:00 noon, London time, (ii) in the case of European Swingline Loans, 11:00 a.m. London time), and (iii) with respect to all other payments, 3:00 p.m., New York time, on the date when due, in immediately available funds, without condition or deduction for any counterclaim, defense, recoupment or setoff. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All payments by any Loan Party shall be made to the Administrative Agent at Agent’s Account, for the account of the respective Lenders to which such payment is owed, except payments to be made directly to an Issuing Bank or a Swingline Lender as expressly provided herein and except that payments pursuant to [Section 2.12](#), [Section 2.13](#), [Section 2.15](#), [Section 2.16](#), [Section 2.22](#) and [Section 11.03](#) shall be made directly to the persons entitled thereto and payments pursuant to other Loan Documents shall be made to the persons specified therein. The Administrative Agent shall distribute any such payments received by it for the account of any other person to the appropriate recipient promptly following receipt thereof in like funds as received by the Administrative Agent. If any payment under any Loan Document shall be due on a day that is not a Business

Day, unless specified otherwise, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension. All payments under each Loan Document shall be made in Dollars, except as expressly specified otherwise.

(b) Pro Rata Treatment.

(i) Each payment by Borrowers of interest in respect of the Loans of any Class shall be applied to the amounts of such obligations owing to the Lenders *pro rata* according to the respective amounts then due and owing to the Lenders having Commitments of such Class.

(ii) Each payment by Borrowers on account of principal of the Borrowings of any Class shall be made *pro rata* according to the respective outstanding principal amounts of the Loans of such Class then held by the Lenders.

(c) Insufficient Funds. If at any time insufficient funds are received by and available to the Administrative Agent to pay fully all amounts of principal, Reimbursement Obligations, interest and fees then due hereunder, such funds shall be applied (i) *first*, toward payment of interest and fees then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of interest and fees then due to such parties, and (ii) *second*, toward payment of principal and Reimbursement Obligations then due hereunder, ratably among the parties entitled thereto in accordance with the amounts of principal and Reimbursement Obligations then due to such parties.

(d) Sharing of Set-Off. Subject to the terms of the Intercreditor Agreement, if any Lender (and/or any Issuing Bank, which shall be deemed a “Lender” for purposes of this Section 2.14(d)) shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on any of its Loans or other Obligations resulting in such Lender’s receiving payment of a proportion of the aggregate amount of its Loans and accrued interest thereon or other Obligations greater than its pro rata share thereof as provided herein, then the Lender receiving such greater proportion shall (a) notify the Administrative Agent of such fact, and (b) purchase (for cash at face value) participations in the Loans and such other obligations of the other Lenders, or make such other adjustments as shall be equitable, so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of principal of and accrued interest on their respective Loans and other amounts owing them, provided that:

(i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest; and

(ii) the provisions of this paragraph shall not be construed to apply to (x) any payment made by any Loan Party pursuant to and in accordance with the express terms of this Agreement or (y) any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements to any assignee or participant, other than to any Loan Party or any Subsidiary thereof (as to which the provisions of this paragraph shall apply).

Each Loan Party consents to the foregoing and agrees, to the extent it may effectively do so under Applicable Law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against such Loan Party rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of such Loan Party in the amount of such participation. If under applicable Debtor Relief Laws any Secured Party receives a secured claim in lieu of a setoff or counterclaim to which this Section 2.14(d) applies, such Secured Party shall to the extent practicable, exercise its rights in respect of such secured claim in a manner consistent with the rights to which the Secured Party is entitled under this Section 2.14(d) to share in the benefits of the recovery of such secured claim.

(e) Borrower Default. Unless the Administrative Agent shall have received notice from Administrative Borrower prior to the date on which any payment is due to the Administrative Agent for the account of the Lenders or any Issuing Bank hereunder that the applicable Borrower will not make such payment, the Administrative Agent may assume that the applicable Borrower has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the Lenders or such Issuing Bank, as the case may be, the amount due. In such event, if the applicable Borrower has not in fact made such payment, then each of the Lenders or each Issuing Bank, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or such Issuing Bank with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at the greater of the Interbank Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation. A notice of the Administrative Agent to any Lender or the Administrative Borrower with respect to any amount owing under this Section 2.14(e) shall be conclusive, absent manifest error.

(f) Lender Default. If any Lender shall fail to make any payment required to be made by it hereunder, including pursuant to Section 2.02(c), Section 2.14(d), Section 2.14(e), Section 2.17(c), Section 2.17(g), Section 2.18, Section 10.05, or Section 10.09, then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), apply any amounts thereafter received by the Administrative Agent for the account of such Lender to satisfy such Lender’s obligations under such Sections until all such unsatisfied obligations are fully paid. Administrative Agent may (but shall not be required to), in its discretion, retain any payments or other funds received by any Agent that are to be provided to a Defaulting Lender hereunder, and may apply such funds to such Lender’s defaulted obligations or readvance the funds to Borrowers in accordance with this Agreement. The failure of any Lender to fund a Loan, to make any payment in respect of any LC Obligation or to otherwise perform its obligations hereunder shall not relieve any other Lender of its obligations, and no Lender shall be responsible for default by another Lender. Lenders and each Agent agree (which agreement is solely among them, and not for the benefit of or enforceable by any Borrower) that, solely for purposes of determining a Defaulting Lender’s right to vote on matters relating to the Loan

Documents (other than those matters that would (i) increase or extend the Commitment of such Lender, (ii) reduce the amount of or extend the time for final payment of principal owing to such Lender, (iii) modify provisions affecting a Defaulting Lender's voting rights or (iv) treat or affect a Defaulting Lender more adversely than the other Lenders) and to share in payments, fees and Collateral proceeds thereunder, a Defaulting Lender shall not be deemed to be a "Lender" until all its defaulted obligations have been cured.

SECTION 2.15 Taxes.

(a) Payments Free of Taxes. Any and all payments by or on account of any obligation of the Loan Parties hereunder or under any other Loan Document shall be made free and clear of and without reduction or withholding for any Indemnified Taxes or Other Taxes; provided that if any Loan Party shall be required by Applicable Law to deduct any Indemnified Taxes or Other Taxes from such payments, then (i) the applicable Loan Party shall increase the sum payable as necessary so that after all such required deductions and withholdings (including any such deductions and withholdings applicable to additional sums payable under this Section) each Agent, Lender or Issuing Bank, as the case may be, receives an amount equal to the sum it would have received had no such deductions or withholdings been made, (ii) the applicable Loan Party shall make such deductions or withholdings and (iii) the applicable Loan Party shall timely pay the full amount deducted or withheld to the relevant Taxing Authority in accordance with Applicable Law.

~~The~~ A U.K. Borrower is not required to make an increased payment to any ~~Agent, Revolving Lender or Issuing Bank~~, under this Section for a deduction on account of an Indemnified Tax imposed by the United Kingdom with respect to a payment of interest on a Loan, if on the date on which the payment falls due:

(i) the payment could have been made to ~~that Agent, Lender or Issuing Bank~~ the relevant Revolving Lender without deduction if it was a U.K. Qualifying Lender, but on that date that ~~Agent, Revolving Lender or Issuing Bank~~ is not or has ceased to be a U.K. Qualifying Lender other than as a result of any change after the Existing Credit Agreement Closing Date in (or in the interpretation, administration, or application of) any law or treaty, or any published practice or concession of any relevant Taxing Authority; or

(ii) the relevant ~~lender~~ Revolving Lender is a U.K. Qualifying Lender solely under part (B) of the definition of that term and it has not confirmed in writing to the applicable U.K. Borrower that it falls within that part (this subclause shall not apply where the Revolving Lender has not so confirmed and a change after the Existing Credit Agreement Closing Date in (or in the interpretation, administration or application of) any law, or any published practice or concession of any relevant Taxing Authority either: (I) renders such confirmation unnecessary in determining whether the applicable U.K. Borrower is required to make a withholding or deduction for, or on account of Tax, or (II) prevents the Revolving Lender from giving such confirmation); or

(iii) ~~a payment~~ the relevant Revolving Lender is ~~due to~~ a Treaty Lender and the applicable U.K. Borrower making the payment is able to demonstrate that the payment could have been made to the Revolving Lender without deduction had the Revolving Lender complied with its obligations under Section 2.15(g).

(b) Payment of Other Taxes by Borrowers. Without limiting the provisions of paragraph (a) above, each Loan Party shall timely pay any Other Taxes to the relevant Taxing Authority in accordance with Applicable Law.

(c) Indemnification by Borrowers. Each Loan Party shall indemnify each Agent, Lender and Issuing Bank, within ten (10) Business Days after demand therefor, for the full amount of any Indemnified Taxes or Other Taxes (including Indemnified Taxes or Other Taxes imposed or asserted on or attributable to amounts payable under this Section) paid by such Agent, Lender or Issuing Bank, as the case may be, and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes or Other Taxes were correctly or legally imposed or asserted by the relevant Taxing Authority. A certificate as to the amount of such payment or liability delivered to Administrative Borrower by a Lender or an Issuing Bank (with a copy to the Administrative Agent), or by an Agent on its own behalf or on behalf of a Lender or an Issuing Bank, shall be conclusive absent manifest error. No Borrower shall be obliged to provide indemnity under this Section where the Indemnified Tax or Other Tax in question is (i) compensated for by an increased payment under Sections 2.15(a) or 2.12(g) or (ii) would have been compensated for by an increased payment under Section 2.15(a) but was not so compensated solely because of one of the exclusions in that Section.

(d) Evidence of Payments. As soon as practicable after any payment of Indemnified Taxes or Other Taxes by any Loan Party to a Taxing Authority, the applicable Loan Party shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Taxing Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(e) Status of Lenders. Except with respect to U.K. withholding taxes (provision for which is made by Section 2.15(g)), any Lender lending to a non-U.K. Borrower that is entitled to an exemption from or reduction of withholding tax under the law of the jurisdiction in which the applicable Loan Party is resident for tax purposes, or any treaty to which such jurisdiction is a party, with respect to payments hereunder or under any other Loan Document shall, to the extent it may lawfully do so, deliver to Administrative Borrower (with a copy to the Administrative Agent) if reasonably requested by Administrative Borrower or the Administrative Agent (and from time to time thereafter, as requested by Administrative Borrower or Administrative Agent), such properly completed and executed documentation prescribed by Applicable Law or any subsequent replacement or substitute form that it may lawfully provide as will permit such payments to be made without withholding or at a reduced rate of withholding; provided, however, that no such Lender shall be required to provide any such documentation or

form if, in the relevant Lender's reasonable judgment, doing so would subject such Lender to any material unreimbursed costs or otherwise be disadvantageous to it in any material respect. In addition, any such Lender, if requested by Administrative Borrower or the Administrative Agent, shall, to the extent it may lawfully do so, deliver such other documentation reasonably requested by Administrative Borrower or the Administrative Agent as will enable the applicable Loan Parties or the Administrative Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements; provided, however, that no Lender shall be required to provide any such documentation if, in the relevant Lender's reasonable judgment, doing so would subject such Lender to any material unreimbursed costs or otherwise be disadvantageous to it in any material respect; and provided, further, that the Administrative Borrower may treat any Agent, Lender or Issuing Bank as an "exempt recipient" based on the indicators described in

Treasury Regulations Section 1.6049-4(c) and if it may be so treated, such Agent, Lender or Issuing Bank shall not be required to provide such documentation, except to the extent such documentation is required pursuant to the Treasury Regulations promulgated under the Code Section 1441.

Each Lender which so delivers any document requested by Administrative Borrower or Administrative Agent in Section 2.15(e) herein further undertakes to deliver to Administrative Borrower (with a copy to Administrative Agent), upon request of Administrative Borrower or Administrative Agent, copies of such requested form (or a successor form) on or before the date that such form expires or becomes obsolete or after the occurrence of any event requiring a change in the most recent form so delivered by it, and such amendments thereto or extensions or renewals thereof as may be reasonably requested by Administrative Borrower or Administrative Agent, in each case, unless an event (including any change in treaty, law or regulation) has occurred prior to the date on which any such delivery would otherwise be required that renders all such forms inapplicable or that would prevent such Lender from duly completing and delivering any such form with respect to it. For avoidance of doubt, Borrowers shall not be required to pay additional amounts to any Lender or Administrative Agent pursuant to this Section 2.15 to the extent the obligation to pay such additional amount would not have arisen but for the failure of such Lender or Administrative Agent to comply with this paragraph.

Each Lender and Issuing Bank shall promptly notify the Administrative Borrower and the Administrative Agent of any change in circumstances that would change any claimed Tax exemption or reduction. Each Lender and Issuing Bank shall indemnify, hold harmless and reimburse (within 10 days after demand therefor) ~~Borrowers and~~ the Administrative Agent for any Taxes, losses, claims, liabilities, penalties, interest and expenses (including reasonable attorneys' fees) incurred by or asserted against ~~a Borrower or the~~ Administrative Agent by any Governmental Authority due to such Lender's or Issuing Bank's failure to deliver, or inaccuracy or deficiency in, any documentation required to be delivered by it pursuant to this Section. Each Lender and Issuing Bank authorizes the Administrative Agent to set off any amounts due to the Administrative Agent ~~or the Borrower~~ under this Section against any amounts payable to such Lender or Issuing Bank under any Loan Document.

Any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to the Administrative Borrower and the Administrative Agent (in such number of copies as shall be requested by the recipient) on or prior to the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of the Administrative Borrower or the Administrative Agent) executed originals of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit the Administrative Borrower or the Administrative Agent to determine the withholding or deduction required to be made.

(f) Treatment of Certain Refunds. If an Agent, a Lender or an Issuing Bank determines, in its sole discretion, that it has received a refund of, credit against, relief or remission for any Indemnified Taxes or Other Taxes as to which it has been indemnified by the Loan Parties or with respect to which any Loan Party has paid additional amounts pursuant to this Section, Section 2.12(g), or Section 2.06(j), it shall pay to such Loan Party an amount equal to such refund, credit, relief or remission (but only to the extent of indemnity payments made, or additional amounts paid, by such Loan Party under this Section with respect to the Indemnified Taxes or Other Taxes giving rise to such refund or any additional amounts under Section 2.12(g), or Section 2.06(j)), net of all reasonable and customary out-of-pocket expenses of such Agent, Lender or Issuing Bank, as the case may be, and without interest (other than any interest paid by the relevant Taxing Authority with respect to such refund or any additional amounts under Section 2.12(g), or Section 2.06(j)); provided that each Loan Party, upon the request of such Agent, such Lender or such Issuing Bank, agrees to repay the amount paid over to such Loan Party (plus any penalties, interest or other charges imposed by the relevant Taxing Authority) to such Agent, Lender or Issuing Bank in the event such Agent, Lender or Issuing Bank is required to repay such refund to such Taxing Authority. Nothing in this Agreement shall be construed to require any Agent, any Lender or any Issuing Bank to make available its tax returns (or any other information relating to its taxes that it deems confidential) to any Loan Party or any other person. Notwithstanding anything to the contrary, in no event will any Agent, Lender or Issuing Bank be required to pay any amount to any Loan Party the payment of which would place such Agent, Lender or Issuing Bank in a less favorable net after-tax position than such Agent, Lender or Issuing Bank would have been in if the additional amounts giving rise to such refund of any Indemnified Taxes or Other Taxes had never been paid.

(g) Cooperation. Notwithstanding anything to the contrary in Section 2.15(e), with respect to ~~non-U.S.U.K.~~ withholding taxes, the relevant Agent, the relevant Lender(s) (at the written request of the relevant Loan Party) and the relevant Loan Party, shall cooperate in completing any procedural formalities necessary (including delivering any documentation prescribed by Applicable Law and making any necessary reasonable approaches to the relevant Taxing Authorities) for the relevant Loan Party to obtain authorization to make a payment to which such Agent or such Lender(s) is entitled without any, or a reduced rate of, deduction or withholding for, or on account of, Taxes; provided, however, that no Agent nor any Lender shall be required to provide any documentation that it is not legally entitled to provide, or take any action that, in the relevant Agent's or the relevant Lender's reasonable judgment, would subject such Agent or such Lender to any material unreimbursed costs or otherwise be disadvantageous to it in any material respect; and provided, however, that nothing in this Section 2.15(g) shall require a Treaty Lender to: (A) register under the HMRC DT Treaty Passport Scheme; (B) apply the HMRC DT Treaty Passport Scheme to any

Borrowing if it has so registered; or (C) file Treaty forms if it is registered under the HMRC DT Treaty Passport Scheme and has indicated to ~~the~~any U.K. Borrower that it wishes the HMRC DT Treaty Passport Scheme to apply to this Agreement.

(h) Treaty Relief Time Limit Obligations. Subject to Section 2.15(g), a Treaty Lender in respect of an advance to ~~the~~any U.K. Borrower shall within 30 days of becoming a Lender in respect of that advance, (unless it is unable to do so as a result of any change after the Existing Credit Agreement Closing Date in (or in the interpretation, administration, or application of) any law or treaty, or any published practice or concession of any relevant Taxing Authority), and except where it is registered under the HMRC DT Treaty Passport Scheme and has indicated to ~~the~~any U.K. Borrower that it wishes the HMRC DT Treaty Passport Scheme to apply to this Agreement), file with the appropriate Taxing Authority for certification a duly completed U.K. double taxation relief application form for ~~the~~each U.K. Borrower to obtain authorization to pay interest to that Lender in respect of such advance without a deduction for Taxes in respect of Tax imposed by the United Kingdom on interest and provide ~~the~~each U.K. Borrower with reasonably satisfactory evidence that such form has been filed. If a Treaty Lender fails to comply with its obligations under this Section 2.15(h), ~~the~~a U.K. Borrower shall not be required to make an increased payment to that Lender under Section 2.15(a) until such time as such Lender has filed such relevant documentation in respect of such U.K. Borrower. This Section 2.15(h) shall not apply to a Treaty Lender if a filing under the SL Scheme has been made in respect of that Treaty Lender in accordance with Section 2.15(j) and HM Revenue & Customs have confirmed that the SL Scheme is applicable in respect of that Treaty Lender. The Administrative Agent and/or the relevant Treaty Lender, as applicable, shall use reasonable efforts to promptly provide to HM Revenue & Customs any additional information or documentation requested by HM Revenue & Customs from the Administrative Agent or the relevant Treaty Lender (as the case may be) in connection with a treaty relief claim under this paragraph; ~~provided, however that neither and the Administrative Agent nor any Treaty Lender shall be required to provide any information or documentation that it is not legally entitled to provide, or take any action that, in the Administrative Agent's or the relevant Lender's reasonable judgment would subject the Administrative Agent or such Lender to any material unreimbursed costs or otherwise be disadvantageous to it in any material respect; and/or the relevant Treaty Lender and such UK Borrower shall co-operate in completing any additional procedural formalities necessary for that UK Borrower to obtain authorisation to make pay such Treaty Lender without a Tax Deduction.~~

(i) Requirement to Seek Refund in Respect of an Increased Payment. If ~~the~~any U.K. Borrower makes a tax deduction (a “**Tax Deduction**”) in respect of tax imposed by the United Kingdom on interest from a payment of interest to a Treaty Lender, and Section 2.15(a) applies to increase the amount of the payment due to that Treaty Lender from ~~the~~such U.K. Borrower, ~~the~~such U.K. Borrower shall promptly provide the Treaty Lender with an executed original certificate, in the form required by HM Revenue & Customs, evidencing the Tax Deduction. The Treaty Lender shall, within a reasonable period following receipt of such certificate, apply to HM Revenue & Customs for a refund of the amount of the tax deduction and, upon receipt by the Treaty Lender of such amount from HM Revenue & Customs, Section 2.15(f) shall apply in relation thereto and for the avoidance of doubt, a refund obtained pursuant to this Section 2.15(i) shall be considered as received by the Treaty Lender for the purposes of Section 2.15(f) and no Agent, Lender or Issuing Bank shall have discretion to determine otherwise; ~~provided, however that this Section 2.15(i) shall not require a Treaty Lender to apply for always that the Treaty Lender and the UK Borrower shall co-operate to enable the Treaty Lender to complete any additional procedural formalities necessary for such Treaty Lender to receive~~ a refund of the amount of the Tax Deduction ~~if the procedural formalities required in relation to making such an application are materially more onerous or require the disclosure of materially more information than the procedural formalities required by HM Revenue & Customs as at the Existing Credit Agreement Closing Date in relation to such an application.~~from HMRC.

(j) U.K. Syndicated Loan Scheme.

For the avoidance of doubt, this Section 2.15(j) shall apply only if and to the extent that the SL Scheme is available to Treaty Lenders.

Each Treaty Lender:

(i) irrevocably appoints the U.K. Borrower to act as syndicate manager under, and authorizes the U.K. Borrower to operate, and take any action necessary or desirable under, the SL Scheme in connection with the Loan Documents and Loans;

(ii) shall cooperate with the U.K. Borrower in completing any procedural formalities necessary under the SL Scheme, and shall promptly supply to the U.K. Borrower such information as the U.K. Borrower may reasonably request in connection with the operation of the SL Scheme;

(iii) without limiting the liability of any Loan Party under this Agreement, shall, within five (5) Business Days of demand, indemnify the U.K. Borrower for any liability or loss incurred by the U.K. Borrower as a result of the U.K. Borrower acting as syndicate manager under the SL Scheme in connection with the Treaty Lender's participation in any Loan (except to the extent that the liability or loss arises directly from the U.K. Borrower's gross negligence or willful misconduct); and

(iv) shall, within five (5) Business Days of demand, indemnify the U.K. Borrower for any tax which the U.K. Borrower becomes liable to pay in respect of any payments made to such Treaty Lender arising as a result of any incorrect information supplied by such Treaty Lender under paragraph (ii) above which results in a provisional authority issued by the HM Revenue & Customs under the SL Scheme being withdrawn.

The U.K. Borrower acknowledges that it is fully aware of its contingent obligations under the SL Scheme and shall act in accordance with any provisional notice issued by the HM Revenue & Customs under the SL Scheme.

All parties acknowledge that the U.K. Borrower (acting as syndicate manager):

(v) is entitled to rely completely upon information provided to it in connection with this Section 2.15(j);

(vi) is not obliged to undertake any enquiry into the accuracy of such information, nor into the status of the Treaty Lender providing such information; and

(vii) shall have no liability to any person for the accuracy of any information it submits in connection with this Section 2.15(j).

(k) Tax Returns. Except as otherwise provided in Section 2.15(h) or (j), if, as a result of executing a Loan Document, entering into the transactions contemplated thereby or with respect thereto, receiving a payment or enforcing its rights thereunder, an Agent, Lender or Issuing Bank is required to file a Tax Return in a jurisdiction in which it would not otherwise be required to file, the Loan Parties shall promptly provide such information necessary for the completion and filing of such Tax Return as the relevant Agent, Lender or Issuing Bank shall reasonably request with respect to the completion and filing of such Tax Return. For clarification, any expenses incurred in connection with such filing shall be subject to Section 11.03.

(l) Value Added Tax. All amounts set out, or expressed to be payable under a Loan Document by any party to a Lender, Agent or Issuing Bank which (in whole or in part) constitute the consideration for any supply for value added tax purposes shall be deemed to be exclusive of any value added tax which is chargeable on such supply, and accordingly, if value added tax is chargeable on any supply made by any Lender, Agent or Issuing Bank to any party under a Loan Document, that party shall pay to the Lender, Agent or Issuing Bank (in addition to and at the same time as paying the consideration) an amount equal to the amount of the value added tax (and such Lender, Agent or Issuing Bank shall promptly provide an appropriate value added tax invoice to such party).

Where a Loan Document requires any party to reimburse a Lender, Agent or Issuing Bank for any costs or expenses, that party shall also at the same time pay and indemnify the Lender, Agent or Issuing Bank against all value added tax incurred by the Lender, Agent or Issuing Bank in respect of the costs or expenses to the extent that the party reasonably determines that neither it nor any other member of any group of which it is a member for value added tax purposes is entitled to credit or repayment from the relevant ~~Tax~~Taxing Authority in respect of the value added tax.

If any Lender, Agent or Issuing Bank requires any Loan Party to pay any additional amount pursuant to Section 2.15(l), then such Lender, Agent or Issuing Bank and Loan Party shall use reasonable efforts to cooperate to minimize the amount such Loan Party is required to pay if, in the judgment of such Lender, Agent or Issuing Bank, such co-operation would not subject such Lender, Agent or Issuing Bank to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender, Agent or Issuing Bank.

(m) FATCA. If a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding tax imposed pursuant to FATCA if such Lender were to fail to comply with applicable reporting and other requirements of FATCA (including those contained in section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Administrative Borrower and the Administrative Agent (or, in the case of a Participant, to the Lender granting the participation only), at the time or times prescribed by Applicable Law and ~~as at such time or times~~ reasonably requested by Administrative Borrower or the Administrative Agent; ~~(A) two accurate, complete and signed certifications or, in the case of a Participant, the Lender granting the participation), such documentation~~ prescribed by Applicable Law ~~and/or reasonably satisfactory to Administrative Borrower and the Administrative Agent as may be necessary to determine the amount, if any, to be deducted and withheld from such payment in compliance with FATCA and (B) any other (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional~~ documentation reasonably requested by Administrative Borrower or the Administrative Agent ~~sufficient (or, in the case of a Participant, the Lender granting the participation) as may be necessary~~ for Administrative Borrower ~~and/or~~ the Administrative Agent ~~or any other Borrower~~ to comply with their obligations under FATCA and to determine that such Lender has complied with such ~~applicable reporting and other requirements of FATCA~~. Lender's obligations under FATCA or to determine the amount to deduct and withhold from such payment. Solely for purposes of this clause (m), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(n) Indemnification by the Lenders. Each Lender and Issuing Bank shall severally indemnify the Administrative Agent, within 10 days after demand therefor, for (i) any Indemnified Taxes attributable to such Lender or Issuing Bank (but only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes and without limiting the obligation of the Loan Parties to do so), (ii) any Taxes attributable to such Lender's or Issuing Bank's failure to comply with the provisions of Section 11.04(d) relating to the maintenance of a Participant Register and (iii) any Excluded Taxes attributable to such Lender or Issuing Bank, in each case, that are payable or paid by the Administrative Agent in connection with any Loan Document, and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability delivered to any Lender or Issuing Bank by the Administrative Agent shall be conclusive absent manifest error. Each Lender and Issuing Bank hereby authorizes the Administrative Agent to set off and apply any and all amounts at any time owing to such Lender or Issuing Bank under any Loan Document or otherwise payable by the Administrative Agent to the Lender or Issuing Bank from any other source against any amount due to the Administrative Agent under this clause (n).

SECTION 2.16 **Mitigation Obligations; Replacement of Lenders.**

(a) **Designation of a Different Lending Office.** Each Lender may at any time or from time to time designate, by written notice to the Administrative Agent, one or more lending offices (which, for this purpose, may include Affiliates of the respective Lender) for the various Loans made, and Letters of Credit participated in, by such Lender; provided that, to the extent such designation shall result, as of the time of such designation, in increased costs under Section 2.12 or Section 2.15 in excess of those which would be charged in the absence of the designation of a different lending office (including a different Affiliate of the respective Lender), then the Borrowers shall not be obligated to pay such excess increased costs (although the Borrowers, in accordance with and pursuant to the other provisions of this Agreement, shall be obligated to pay the costs which would apply in the absence of such designation and any subsequent increased costs of the type described above resulting from changes after the date of the respective designation); provided, further, that such designation would permit such Lender to continue to make, fund, and maintain Eurocurrency Loans and EURIBOR Loans and to convert Loans into Eurocurrency Loans and EURIBOR Loans; and provided, further, that with respect to any Loan (and so long as no Event of Default shall have occurred and is continuing), if such Lender is a Swiss Qualifying Bank, such branch or Affiliate must also qualify as a Swiss Qualifying Bank. Each lending office and Affiliate of any Lender designated as provided above shall, for all purposes of this Agreement, be treated in the same manner as the respective Lender (and shall be entitled to all indemnities and similar provisions in respect of its acting as such hereunder). The first proviso to the first sentence of this Section 2.16(a) shall not apply to changes in a lending office pursuant to Section 2.16(b) if such change was made upon the written request of the Administrative Borrower.

(b) **Mitigation Obligations.** If any Lender requests compensation or submits a notification of illegality, impossibility or impracticality under Section 2.12, or requires any Loan Party to pay any additional amount to any Lender or any Taxing Authority for the account of any Lender pursuant to Section 2.15, then such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign its rights and obligations hereunder to another of its offices, branches or affiliates, if, in the judgment of such Lender, such designation or assignment (i) would eliminate or reduce amounts payable pursuant to Section 2.12 or Section 2.15, as the case may be, in the future, (ii) would permit such Lender to continue to make, fund, and maintain Eurocurrency Loans and EURIBOR Loans and to convert Loans into Eurocurrency Loans and EURIBOR Loans, and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. Each Loan Party hereby agrees to pay all reasonable costs and expenses incurred by any Lender in connection with any such designation or assignment. A certificate setting forth such costs and expenses submitted by such Lender to Administrative Borrower shall be conclusive absent manifest error.

(c) **Replacement of Lenders.** If any Lender requests compensation or submits a notification of illegality, impossibility or impracticality under Section 2.12, or if any Borrower is required to pay any additional amount to any Lender or any Taxing Authority for the account of any Lender pursuant to Section 2.15, or if any Lender is a Defaulting Lender, then, in addition to any other rights and remedies that any Person may have, Administrative Agent may, by notice to such Lender within 120 days after such event, require such Lender to assign all of its rights and obligations under the Loan Documents to Eligible Assignee(s) specified by Administrative Agent, pursuant to appropriate Assignment and Assumption(s) and within 20 days after Agent's notice. Administrative Agent is irrevocably appointed as attorney-in-fact to execute any such Assignment and Assumption if the Lender fails to execute same. Such Lender shall be entitled to receive, in cash, concurrently with such assignment, all amounts owed to it under the Loan Documents, including all principal, interest and fees through the date of assignment (including any amount payable pursuant to Section 2.13).

SECTION 2.17 **Swingline Loans.**

(a) **U.S. Swingline Loans.** The Administrative Agent, the U.S. Swingline Lender and the Revolving Lenders agree that in order to facilitate the administration of this Agreement and the other Loan Documents, promptly after the Administrative Borrower requests a Base Rate Revolving Loan, the U.S. Swingline Lender may elect to have the terms of this Section 2.17(a) apply to up to \$70,000,000 (or, on and after the Specified Incremental Commitment Availability Date, \$80,000,000) of such Borrowing Request by crediting, on behalf of the Revolving Lenders and in the amount requested, same day funds to the U.S. Borrowers, in the case of U.S. Revolving Loans made to them, or the ~~Parent~~Canadian Borrower, in the case of U.S. Revolving Loans made to it (or, in the case of a U.S. Swingline Loan made to finance the reimbursement of an LC Disbursement in respect of a U.S. Letter of Credit as provided in Section 2.18, by remittance to the applicable Issuing Bank), on the applicable Borrowing date as directed by the Administrative Borrower in the applicable Borrowing Request maintained with the Administrative Agent (each such Loan made solely by the U.S. Swingline Lender pursuant to this Section 2.17(a) is referred to in this Agreement as a "**U.S. Swingline Loan**"), with settlement among them as to the U.S. Swingline Loans to take place on a periodic basis as set forth in Section 2.17(c). Each U.S. Swingline Loan shall be subject to all the terms and conditions (including the satisfaction of the Funding Conditions) applicable to other Base Rate Revolving Loans funded by the Revolving Lenders,

except that all payments thereon shall be payable to the U.S. Swingline Lender solely for its own account. U.S. Swingline Loans shall be made in minimum amounts of \$1,000,000 and integral multiples of \$500,000 above such amount.

(b) **U.S. Swingline Loan Participations.** Upon the making of a U.S. Swingline Loan (whether before or after the occurrence of a Default and regardless of whether a Settlement has been requested with respect to such U.S. Swingline Loan), each Revolving Lender shall be deemed, without further action by any party hereto, to have unconditionally and irrevocably purchased from the U.S. Swingline Lender, without recourse or warranty, an undivided interest and participation in such U.S. Swingline Loan in proportion to its Pro Rata Percentage of the Revolving Commitment. The U.S. Swingline Lender may, at any time, require the Revolving

Lenders to fund their participations. From and after the date, if any, on which any Revolving Lender is required to fund its participation in any U.S. Swingline Loan purchased hereunder, the Administrative Agent shall promptly distribute to such Lender, such Lender's Pro Rata Percentage of all payments of principal and interest and all proceeds of Collateral received by the Administrative Agent that are payable to such Lender in respect of such Loan.

(c) U.S. Swingline Loan Settlement. The Administrative Agent, on behalf of the U.S. Swingline Lender, shall request settlement (a "Settlement") with the Revolving Lenders on at least a weekly basis or on any date that the Administrative Agent elects, by notifying the Revolving Lenders of such requested Settlement by facsimile, telephone, or e-mail no later than 12:00 noon, New York time on the date of such requested Settlement (the "Settlement Date"). Each Revolving Lender (other than the U.S. Swingline Lender, in the case of the U.S. Swingline Loans) shall transfer the amount of such Revolving Lender's Pro Rata Percentage of the outstanding principal amount of the applicable Loan with respect to which Settlement is requested to the Administrative Agent, to such account of the Administrative Agent as the Administrative Agent may designate, not later than 3:00 p.m., New York time, on such Settlement Date. Settlements may occur during the existence of a Default and whether or not the applicable conditions precedent set forth in Section 4.02 have then been satisfied. Such amounts transferred to the Administrative Agent shall be applied against the amounts of the U.S. Swingline Lender's U.S. Swingline Loans and, together with U.S. Swingline Lender's Pro Rata Percentage of such U.S. Swingline Loan, shall constitute U.S.

Revolving Loans of such Revolving Lenders. If any such amount is not transferred to the Administrative Agent by any Revolving Lender on such Settlement Date, each of such Lender and the U.S. Borrowers severally agrees to repay to the U.S. Swingline Lender forthwith on demand such corresponding amount together with interest thereon, for each day from the date such amount is made available to such Borrowers until the date such amount is repaid to the U.S. Swingline Lender at (i) in the case of such U.S. Borrowers, the interest rate applicable at the time to the Loans comprising such Borrowing and (ii) in the case of such Lender, the greater of the Interbank Rate and a rate determined by the Administrative Agent in accordance with banking industry rules on interbank compensation. If such Lender shall repay to the U.S. Swingline Bank such corresponding amount, such amount shall constitute such Lender's Loan as part of such Borrowing for purposes of this Agreement, and the applicable Borrowers' obligations to repay the Administrative Agent such corresponding amount pursuant to this Section 2.17(c) shall cease.

(d) European Swingline Commitment. Subject to the terms and conditions set forth herein, the European Swingline Lender agrees to make European Swingline Loans to the European Administrative Borrower, ~~the any Swiss Borrower, any~~ U.K. Borrower, and ~~the any~~ German Borrower, from time to time during the Revolving Availability Period, in an aggregate principal amount at any time outstanding that will not (subject to the provisions of Section 2.01(e)) result in (i) the aggregate principal amount of outstanding European Swingline Loans exceeding the European Swingline Commitment, (ii) ~~(A) the Total Adjusted Revolving Exposure (German) exceeding the Total Adjusted Borrowing Base (German), (B) the Total Adjusted Revolving Exposure (Swiss) exceeding the Total Adjusted Borrowing Base (Swiss) or (B) the Total Adjusted Revolving Exposure exceeding the Total Adjusted Borrowing Base, or (iii) the Total Revolving Exposure exceeding the lesser of (A) the Total Revolving Commitment and (B) the Total Borrowing Base then in effect~~ one or more of the Funding Conditions failing to be satisfied; provided that the European Swingline Lender shall not be required to make a European Swingline Loan ~~(ix)~~ to refinance an outstanding European Swingline Loan, or if another European Swingline Loan is then outstanding or ~~(ix)~~ if a European Swingline Loan has been outstanding within three (3) Business Days prior to the date of such requested European Swingline Loan. Within the foregoing limits and subject to the terms and conditions set forth herein, the European Administrative Borrower, ~~the each Swiss Borrower, each~~ U.K. Borrower, and ~~the each~~ German Borrower may borrow, repay and reborrow European Swingline Loans.

(e) European Swingline Loans. To request a European Swingline Loan, the European Administrative Borrower, ~~the any Swiss Borrower, any~~ U.K. Borrower, or ~~the any~~ German Borrower, as applicable, shall deliver, by hand delivery or telecopier, a duly completed and executed Borrowing Request to the Administrative Agent and the European Swingline Lender (i) in the case of a European Swingline Loan (other than a European Swingline Loan made in Swiss francs), not later than 11:00 a.m., London time, on the day of a proposed European Swingline Loan and (ii) in the case of a European Swingline Loan made in Swiss francs, not later than 11:00 a.m., London time, one (1) Business Day before the date of prepayment. Each such notice shall be irrevocable and shall specify the requested date (which shall be a Business Day), currency, Interest Period, and the amount of the requested European Swingline Loan. All Borrowing Requests for a European Swingline Loan which are not made on-line via the Administrative Agent's electronic platform or portal shall be subject to (and unless the Administrative Agent elects otherwise in the exercise of its sole discretion, such Borrowings shall not be made until the completion of) the Administrative Agent's authentication process (with results satisfactory to the Administrative Agent) prior to the funding of any such requested Borrowing. Each European Swingline Loan shall be made in Euros, GBP, Dollars or Swiss francs. Each European Swingline Loan (i) made in Dollars shall be a Base Rate Loan, (ii) made in GBP or Swiss Francs shall be a Eurocurrency Loan with an Interest Period between two days and seven days and (iii) made in Euros shall be a EURIBOR Loan with an Interest Period between two days and seven days. The European Swingline Lender shall make each European Swingline Loan available to the applicable Borrower to an account as directed by such Borrower in the applicable Borrowing Request maintained with the Administrative Agent (or, in the case of a Swingline Loan made to finance the reimbursement of an LC Disbursement as provided in Section 2.18, by remittance to the applicable Issuing Bank) by 4:00 p.m., London time, on the requested date of such European Swingline Loan. No Borrower shall request a European Swingline Loan if at the time of or immediately after giving effect to the extension of credit contemplated by such request a Default has occurred and is continuing or would result therefrom. European Swingline Loans shall be made in minimum amounts of €1,000,000 (for Loans denominated in Euros), GBP1,000,000 (for Loans denominated in GBP), \$1,000,000 (for Loans denominated in Dollars), or CHF1,000,000 (for Loans denominated in Swiss francs) and integral multiples of €500,000, GBP500,000, \$500,000 or CHF500,000, respectively, above such amount.

(f) Prepayment. The European Administrative Borrower, ~~the each Swiss Borrower, each~~ U.K. Borrower, and ~~the each~~ German Borrower, shall have the right at any time and from time to time to repay any European Swingline Loan made to it, in whole or in part, upon

giving written notice to the European Swingline Lender and the Administrative Agent in accordance with Section 2.10(i). All payments in respect of the European Swingline Loans shall be made to the European Swingline Lender at Agent's Account.

(g) Participations. The European Swingline Lender may at any time in its discretion by written notice given to the Administrative Agent (provided such notice requirement shall not apply if the European Swingline Lender and the Administrative Agent are the same entity) not later than 11:00 a.m., London time, on the third succeeding Business Day following such notice require the Revolving Lenders to acquire participations on such Business Day in all or a portion of the European Swingline Loans then outstanding; provided that European Swingline Lender shall not give such notice prior to the occurrence of an Event of Default; provided further, that if (x) such Event of Default is cured or waived in writing in accordance with the terms hereof, (y) no Obligations have yet been declared due and payable under Article 8 (or a rescission has occurred under Section 8.02) and (z) the European

Swingline Lender has actual knowledge of such cure or waiver, all prior to the European

Swingline Lender's giving (or being deemed to give) such notice, then the European Swingline Lender shall not give any such notice based upon such cured or waived Event of Default. Such notice shall specify the aggregate amount of European Swingline Loans in which Revolving Lenders will participate. Promptly upon receipt of such notice, the Administrative Agent will give notice thereof to each Revolving Lender, specifying in such notice such Lender's Pro Rata Percentage of such European Swingline Loan or Loans. Each Revolving Lender hereby absolutely and unconditionally agrees, upon receipt of notice as provided above, to pay to the Administrative Agent, for the account of the European Swingline Lender, such Lender's Pro Rata Percentage of such European Swingline Loan or Loans. All participations in respect of European Swingline Loans (or any portion thereof) denominated in Swiss francs, and all payments by Lenders in respect of such participations, shall be purchased or made in the Dollar Equivalent of such European Swingline Loans (or portion thereof). Each Revolving Lender acknowledges and agrees that its obligation to acquire participations in European Swingline Loans pursuant to this paragraph is absolute and unconditional and shall not be affected by any circumstance whatsoever, including the occurrence and continuance of a Default or reduction or termination of the Commitments, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever (so long as such payment shall not cause such Lender's Pro Rata Percentage of the Total Revolving Exposure to exceed such Lender's Revolving Commitment). Each Revolving Lender shall comply with its obligation under this paragraph by wire transfer of immediately available funds, in the same manner as provided in Section 2.02(c) with respect to Loans made by such Lender (and Section 2.02 shall apply, *mutatis mutandis*, to the payment obligations of the Revolving Lenders), and the Administrative Agent shall promptly pay to the European Swingline Lender the amounts so received by it from the Revolving Lenders. The Administrative Agent shall notify the European Administrative Borrower of any participations in any European Swingline Loan acquired by the Revolving Lenders pursuant to this paragraph, and thereafter payments in respect of such European Swingline Loan shall be made to the Administrative Agent and not to the European Swingline Lender.

Any amounts received by the European Swingline Lender from the European Administrative Borrower, ~~the~~any Swiss Borrower, any U.K. Borrower, or ~~the~~any German Borrower, (or other party on behalf of any such Borrower) in respect of a European Swingline Loan after receipt by the European Swingline Lender of the proceeds of a sale of participations therein shall be promptly remitted to the Administrative Agent. Any such amounts received by the Administrative Agent shall be promptly remitted by the Administrative Agent to the Revolving Lenders that shall have made their payments pursuant to this paragraph, as their interests may appear. The purchase of participations in a European Swingline Loan pursuant to this paragraph shall not relieve the European Administrative Borrower, ~~the~~any Swiss Borrower, any U.K. Borrower, or ~~the~~any German Borrower of any default in the payment thereof.

(h) European Swingline Lender Must Be Swiss Qualified Bank. Notwithstanding any provisions of this Agreement to the contrary, no Person shall be or become European Swingline Lender hereunder unless such Person is a Swiss Qualifying Bank.

SECTION 2.18 Letters of Credit.

(a) (i) The ~~Initial~~Existing Issuing Banks other than HSBC Bank USA, N.A. shall (and other Issuing Banks may, in accordance with the terms and conditions set forth in this Section 2.18) issue Letters of Credit from time to time at the request of the Administrative Borrower (or, as provided below with respect to Canadian Dollar Denominated Letters of Credit, ~~Parent~~Canadian Borrower) (each, a "U.S. Letter of Credit") denominated in any Approved Currency (Canadian Dollars in the case of a Canadian Dollar Denominated Letters of Credit) for the account of a Loan Party (with respect to Canadian Dollar Denominated Letters of Credit, a Canadian Loan Party) until 30 days prior to the Maturity Date applicable to Revolving Loans (provided that Administrative Borrower (or, with respect to Canadian Dollar Denominated Letters of Credit, ~~Parent~~Canadian Borrower) shall be a co-applicant, and be jointly and severally liable, with respect to each U.S. Letter of Credit issued for the account of another Loan Party; and provided, further that U.S. Letters of Credit denominated in Canadian Dollars may be issued by an Issuing Bank (in accordance with the terms and conditions set forth in this Section 2.18) for the account of a Canadian Loan Party (with ~~Parent~~Canadian Borrower as applicant or co-applicant) (each, a "Canadian Dollar Denominated Letter of Credit")) and (ii) the ~~Initial~~Existing Issuing Banks other than HSBC Bank USA, N.A. shall (and other Issuing Banks may, in accordance with the terms and conditions set forth in this Section 2.18) issue Letters of Credit from time to time at the request of the European Administrative Borrower (each, a "European Letter of Credit") denominated in any Approved Currency for the account of a Loan Party until 30 days prior to the Maturity Date applicable to Revolving Loans (provided that the European Administrative Borrower shall be a co-applicant, and be jointly and severally liable, with respect to each European Letter of Credit issued for the account of another Loan Party (unless such European Letter of Credit is issued to the Belgian Borrower, a German Borrower or a Swiss Borrower)), in each case on the terms set forth herein, including the following:

(i) Each Borrower acknowledges that each Issuing Bank's issuance of any Letter of Credit is conditioned upon such Issuing Bank's receipt of an LC Application with respect to the requested Letter of Credit, as well as such other instruments ~~and~~, agreements and LC Documents as such Issuing Bank may customarily require for issuance of a letter of credit of similar type and amount. Each Issuing Bank's records of the content of any such requests will be conclusive. No Issuing Bank shall have any obligation

to issue any Letter of Credit unless (i) such Issuing Bank receives an LC Request and LC Application at least two Business Days prior to the requested date of issuance (or such shorter period as may be acceptable to the such Issuing Bank); (ii) each LC Condition is satisfied; and (iii) if a Defaulting Lender exists, such Lender or Borrowers have entered into arrangements satisfactory to Administrative Agent and each applicable Issuing Bank to eliminate any funding risk associated with the Defaulting Lender. If an Issuing Bank receives written notice from a Lender at least five Business Days before issuance of a Letter of Credit that any LC Condition has not been satisfied, such Issuing Bank shall have no obligation to issue the requested Letter of Credit (or any other) until such notice is withdrawn in writing by that Lender or until Required Lenders have waived such condition in accordance with this Agreement. Prior to receipt of any such notice, no Issuing Bank shall be deemed to have knowledge of any failure of LC Conditions.

(ii) Letters of Credit may be requested by Administrative Borrower, European Administrative Borrower or ~~Parent Borrower~~ the Designated Company only ~~(+)~~ to support obligations of such Borrower or another Loan Party (which shall be a Canadian Loan Party in the case of Canadian Dollar Denominated Letters of Credit); provided that, notwithstanding anything herein to the contrary, any Issuing Bank may, but shall not be obligated to, issue a Letter of Credit that supports the obligations of a Loan Party in respect of a lease of real property by such Loan Party or an employment contract. The renewal or extension of any Letter of Credit shall be treated as the issuance of a new Letter of Credit, except that delivery of a new LC Application shall be required at the discretion of the applicable Issuing Bank.

(iii) The Loan Parties assume all risks of the acts, omissions or misuses of any Letter of Credit by the beneficiary. In connection with issuance of any Letter of Credit, none of Administrative Agent, any other Agent, Issuing Bank or any Lender shall be responsible for the existence, character, quality, quantity, condition, packing, value or delivery of any goods purported to be represented by any LC Documents; any differences or variation in the character, quality, quantity, condition, packing, value or delivery of any goods from that expressed in any LC Documents; the form, validity, sufficiency, accuracy, genuineness or legal effect of any LC Documents or of any endorsements thereon; the time, place, manner or order in which shipment of goods is made; partial or incomplete shipment of, or failure to ship, any goods referred to in a Letter of Credit or LC Documents; any deviation from instructions, delay, default or fraud by any shipper or other Person in connection with any goods, shipment or delivery; any breach of contract between a shipper or vendor and a Loan Party; errors, omissions, interruptions or delays in transmission or delivery of any messages, by mail, cable, telegraph, telex, telecopy, e-mail, telephone or otherwise; errors in interpretation of technical terms; the misapplication by a beneficiary of any Letter of Credit or the proceeds thereof; or any consequences arising from causes beyond the control of any Issuing Bank, any Agent or any Lender, including any act or omission of a Governmental Authority. The rights and remedies of each Issuing Bank under the Loan Documents and the LC Documents shall be cumulative. Each Issuing Bank shall be fully subrogated to the rights and remedies of each beneficiary whose claims against Borrowers are discharged with proceeds of any Letter of Credit.

(iv) In connection with its administration of and enforcement of rights or remedies under any Letters of Credit or LC Documents, each Issuing Bank shall be entitled to act, and shall be fully protected in acting, upon any certification, documentation or communication in whatever form believed by such Issuing Bank, in good faith, to be genuine and correct and to have been signed, sent or made by a proper Person. Each Issuing Bank may consult with and employ legal counsel, accountants and other experts to advise it concerning its obligations, rights and remedies, and shall be entitled to act upon, and shall be fully protected in any action taken in good faith reliance upon, any advice given by such experts. Each Issuing Bank may employ agents and attorneys-in-fact in connection with any matter relating to Letters of Credit or LC Documents, and shall not be liable for the negligence or misconduct of agents and attorneys-in-fact selected with reasonable care.

(v) If Borrower so requests in any applicable Letter of Credit application, the applicable Issuing Bank may, in its discretion, agree to issue a Letter of Credit that has automatic extension provisions (each, an “**Auto-Extension Letter of Credit**”), provided that any such Auto-Extension Letter of Credit must permit such Issuing Bank to prevent any such extension at least once in each twelve-month period (commencing with the date of issuance of such Letter of Credit) by giving prior notice to the beneficiary thereof not later than a day (the “**Non-Extension Notice Date**”) in each such twelve-month period to be agreed upon at the time such Letter of Credit is issued. Unless otherwise directed by such Issuing Bank, the applicable Borrower shall not be required to make a specific request to such Issuing Bank for any such extension. Once an Auto-Extension Letter of Credit has been issued, the Lenders shall be deemed to have authorized (but may not require) such Issuing Bank to permit the extension of such Letter of Credit at any time to an expiry date at least 20 Business Days prior to the Maturity Date or, in the case of each Letter of Credit such later date as agreed to by the Administrative Agent and the Issuing Bank that issued such Letter of Credit in their sole discretion, solely to the extent that such Letter of Credit is cash collateralized pursuant to Section 2.18(c); provided, however, that such Issuing Bank shall not permit any such extension if (A) such Issuing Bank has determined that it would not be permitted, or would have no obligation at such time to issue such Letter of Credit in its revised form (as extended) under the terms hereof, or (B) it has received notice (which may be by telephone or in writing) on or before the day that is seven Business Days before the NonExtension Notice Date (1) from Administrative Agent that the Required Lenders have elected not to permit such extension or (2) from Administrative Agent, any Lender or any Loan Party that one or more of the applicable conditions specified in Section 4.02 is not then satisfied, and in each such case directing such Issuing Bank not to permit such extension.

(b) Reimbursement; Participations.

(i) If an Issuing Bank honors any request for payment under a Letter of Credit, the Applicable LC Applicant shall pay to such Issuing Bank, (A) if the Administrative Agent provides notice of such payment to the Administrative Borrower before 11:00 a.m., New York time, on the same day, and (B) if the Administrative Agent provides such notice after such time, on the next Business Day (such applicable date, the “**Reimbursement Date**”), the amount paid by such Issuing Bank under such Letter of

Credit, together with interest at the interest rate for Base Rate Revolving Loans from the Reimbursement Date until payment by Borrowers; provided that, in the case of any payment on a Canadian Dollar Denominated Letter of Credit or any European Letter of Credit denominated in Swiss francs, such payment shall be the Dollar Equivalent of the amount paid by such Issuing Bank under such Letter of Credit, together with interest in Dollars at the interest rate for Base Rate Revolving Loans from the Reimbursement Date until payment by Borrowers. The obligation of Borrowers to reimburse the applicable Issuing Bank for any payment made under a Letter of Credit shall be absolute, unconditional, irrevocable, and joint and several, and shall be paid without regard to any lack of validity or enforceability of any Letter of Credit or this Agreement (or any term or provision therein or herein); or the ~~the~~ existence of any claim, setoff, defense or other right that Borrowers may have at any time against the beneficiary or against the Issuing Bank; any draft, certificate or other document presented under a Letter of Credit having been determined to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; or any other event or circumstances which might constitute a legal or equitable discharge or provide a right of setoff against the Borrowers' reimbursement obligation. Whether or not the Applicable Administrative Borrower submits a Notice of Borrowing, the Applicable Administrative Borrower shall be deemed to have requested Base Rate Revolving Loans in Dollars in the Dollar Equivalent amount of such LC Disbursement, or with respect to LC Disbursements denominated in euros, GBP or Swiss francs, European Swingline Loans in an equivalent amount of such currency, in an amount necessary to pay all amounts due to an Issuing Bank on any Reimbursement Date and each Lender agrees to fund its Pro Rata share of such Borrowing (or, in the case of European Swingline Loans in Swiss francs, the Dollar Equivalent thereof in accordance with Section 2.17(g)) whether or not the Commitments have terminated, an Overadvance exists or is created thereby, or the conditions in Section 4 are satisfied.

(ii) Upon issuance of a Letter of Credit, each Lender shall be deemed to have irrevocably and unconditionally purchased from the applicable Issuing Bank, without recourse or warranty, an undivided Pro Rata interest and participation in all LC Obligations relating to the Letter of Credit; provided that, in the case of LC Obligations in respect of any Canadian Dollar Denominated Letter of Credit or any European Letter of Credit denominated in Swiss francs, such undivided Pro Rata interest and participation shall be in the Dollar Equivalent thereof. If an Issuing Bank makes any payment under a Letter of Credit and Borrowers do not reimburse such payment on the Reimbursement Date (or if any reimbursement payment is required to be refunded (or that the Administrative Agent or any Issuing Bank elects, based upon the advice of counsel, to refund) to Borrowers for any reason), Administrative Agent shall promptly notify Lenders and each Lender shall promptly (within one Business Day) and unconditionally pay to Administrative Agent, for the benefit of the applicable Issuing Bank, the Lender's Pro Rata share of such payment; provided that, in the case of any payment by Lenders with respect to a Canadian Dollar Denominated Letter of Credit or a European Letter of Credit denominated in Swiss francs, such payment shall be the Dollar Equivalent of such unreimbursed payment. Each Issuing Bank (other than Wells Fargo or any of its Affiliates acting in such capacity) shall notify the Administrative Agent in writing no later than the Business Day prior to the Business Day on which such Issuing Bank issues any Letter of Credit. In addition, each Issuing Bank (other than Wells Fargo or any of its Affiliates acting in such capacity) shall, on the first Business Day of each week (or, in the case of JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited or any of their respective affiliates in their capacities as Issuing Banks, the first Business Day of each month), submit to the Administrative Agent a report detailing the daily undrawn amount of each Letter of Credit issued by such Issuing Bank during the prior calendar week (or, in the case of JPMorgan Chase Bank, N.A., J.P. Morgan Europe Limited or any of their respective affiliates in their capacities as Issuing Banks, during the prior calendar month). Upon request by a Lender, each Issuing Bank shall furnish copies of any Letters of Credit and LC Documents in its possession at such time.

(iii) The obligation of each Lender to make payments to Administrative Agent for the account of an Issuing Bank in connection with such Issuing Bank's payment under a Letter of Credit shall be absolute, unconditional and irrevocable, not subject to any counterclaim, setoff, qualification or exception whatsoever, and shall be made in accordance with this Agreement under all circumstances, irrespective of any lack of validity or unenforceability of any Loan Documents; any draft, certificate or other document presented under a Letter of Credit having been determined to be forged, fraudulent, invalid or insufficient in any respect or any statement therein being untrue or inaccurate in any respect; the existence of any Default or Event of Default that is continuing; the failure to satisfy any LC Condition; or the existence of any setoff or defense that any Loan Party may have with respect to any Obligations. No Issuing Bank assumes any responsibility for any failure or delay in performance or any breach by any Borrower or other Person of any obligations under any LC Documents. No Issuing Bank makes to Lenders any express or implied warranty, representation or guaranty with respect to the Collateral, LC Documents or any Loan Party. No Issuing Bank shall be responsible to any Lender for any recitals, statements, information, representations or warranties contained in, or for the execution, validity, genuineness, effectiveness or enforceability of any LC Documents; the validity, genuineness, enforceability, collectibility, value or sufficiency of any Collateral or the perfection of any Lien therein; or the assets, liabilities, financial condition, results of operations, business, creditworthiness or legal status of any Loan Party.

(iv) No Issuing Bank Indemnitee shall be liable to any Lender or other Person for any action taken or omitted to be taken in connection with any LC Documents except as a result of its actual gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a non-appealable decision). No Issuing Bank shall have any liability to any Lender if such Issuing Bank refrains from any action under any Letter of Credit or LC Documents until it receives written instructions from Required Lenders. Except as otherwise provided herein, Borrowers shall indemnify each Issuing Bank for all losses (except losses resulting from such Issuing Bank's actual gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a non-appealable decision)) incurred in connection with the issuance of Letters of Credit, the use of the proceeds therefrom, and any refusal by such Issuing Bank to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit.

(v) The liability of any Issuing Bank (or any other Issuing Bank Indemnitee) under, in connection with or arising out of any Letter of Credit (or pre-advice), regardless of the form or legal grounds of the action or proceeding, shall be limited to direct damages suffered by Borrowers that are caused directly by such Issuing Bank's gross negligence or willful misconduct

(as determined by a court of competent jurisdiction in a non-appealable decision) in (i) honoring a presentation under a Letter of Credit that on its face does not at least substantially comply with the terms and conditions of such Letter of Credit, (ii) failing to honor a presentation under a Letter of Credit that strictly complies with the terms and conditions of such Letter of Credit or (iii) retaining drawing documents presented under a Letter of Credit. Each Issuing Bank shall be deemed to have acted with due diligence and reasonable care if such Issuing Bank's conduct is in accordance with standard letter of credit practice or in accordance with this Agreement. With respect to documents presented which appear on their face to substantially comply with the terms of a Letter of Credit, each Issuing Bank may, in its sole discretion provided such Issuing Bank's conduct in exercising such discretion is in accordance with standard letter of credit practice, either accept and make payment upon such documents without responsibility for further investigation, regardless of any notice or information to the contrary, or refuse to accept and make payment upon such documents if such documents are not in strict compliance with the terms of such Letter of Credit. Borrowers' aggregate remedies against Issuing Bank and any Issuing Bank Indemnitee for wrongfully honoring a presentation under any Letter of Credit or wrongfully retaining honored drawing documents shall in no event exceed the aggregate amount paid by Borrowers to such Issuing Bank in respect of the honored presentation in connection with such Letter of Credit under Section 2.18(b), plus interest at the rate then applicable to Base Rate Loans hereunder. Borrowers shall take action to avoid and mitigate the amount of any damages claimed against any Issuing Bank or any other Issuing Bank Indemnitee, including by enforcing its rights against the beneficiaries of the Letters of Credit. Any claim by Borrowers under or in connection with any Letter of Credit shall be reduced by an amount equal to the sum of (x) the amount (if any) saved by Borrowers as a result of the breach or alleged wrongful conduct complained of; and (y) the amount (if any) of the loss that would have been avoided had Borrowers taken all reasonable steps to mitigate any loss, and in case of a claim of wrongful dishonor, by specifically and timely authorizing the applicable Issuing Bank to effect a cure. Borrowers are responsible for preparing or approving the final text of the Letter of Credit as issued by any Issuing Bank, irrespective of any assistance such Issuing Bank may provide such as drafting or recommending text or by such Issuing Bank's use or refusal to use text submitted by Borrowers. Borrowers are solely responsible for the suitability of the Letter of Credit for Borrowers' purposes. With respect to any Auto-Extension Letter of Credit, Issuing Bank, in its sole and absolute discretion, may give notice of nonrenewal of such Letter of Credit and, if Borrowers do not at any time want such Letter of Credit to be renewed, Borrowers will so notify

Administrative Agent and the applicable Issuing Bank at least fifteen (15) calendar days before Issuing Bank is required to notify the beneficiary of such Letter of Credit or any advising bank of such nonrenewal pursuant to the terms of such Letter of Credit.

(c) Cash Collateral. If any LC Obligations, whether or not then due or payable, shall for any reason be outstanding at any time (a) that an Event of Default exists, (b) that Excess Availability is less than zero, (c) within 20 Business Days prior to the Maturity Date or (d) upon the termination of this Agreement, then Borrowers shall, at an Issuing Bank's or Administrative Agent's request, cash collateralize all outstanding Letters of Credit in an amount equal to 105% of all LC Exposure. Borrowers shall, on demand by an Issuing Bank or Administrative Agent from time to time, cash collateralize 105% of the LC Exposure of any Defaulting Lender. If Borrowers fail to provide any cash collateral as required hereunder, Lenders may (and shall upon direction of Administrative Agent) advance, as Loans, the

amount of the cash collateral required (whether or not the Commitments have terminated, an Overadvance exists or the conditions in Section 4 are satisfied).

(d) Resignation of Issuing Bank. Any Issuing Bank may resign at any time upon notice to Administrative Agent and Administrative Borrower. On the effective date of such resignation, such Issuing Bank shall have no further obligation to issue, amend, renew, extend or otherwise modify any Letter of Credit, but shall continue to have the benefits of Sections 2.18, 10.05 and 11.03 with respect to any Letters of Credit issued or other actions taken while an Issuing Bank. Upon Following the effective date of the resignation of ~~Initialan~~ Issuing Bank; pursuant to this clause (d), the Administrative Agent ~~shall may~~, with the consent of such Lender, promptly appoint a Lender as ~~replacement~~ Initialan Issuing Bank and, as long as no Default or Event of Default exists, such replacement shall be reasonably acceptable to Administrative Borrower.

(e) Additional Issuing Banks. The Applicable Administrative Borrower may, at any time and from time to time, designate additional Lenders to act as Issuing Banks with respect to Letters of Credit under the terms of this Agreement, in each case with the consent of the Administrative Agent (which consent shall not be unreasonably withheld) and such Lender; provided that at no time shall there be more than ~~threefour~~ Issuing Banks (including ~~the Initial Issuing Bank and issuers of outstanding, as of the Amendment No. 2 Effective Date, the~~ Existing Letters of Credit) Issuing Banks; provided, ~~further~~, that JPMorgan Chase Bank of America, N.A. and HSBC Bank USA, N.A. are each hereby designated as an additional, in its capacity as an Aleris Issuing Bank shall be disregarded for purposes of calculating the number of Issuing Banks under this proviso. Any Lender designated as an Issuing Bank pursuant to this paragraph (e) shall be deemed (in addition to being a Lender) to be the Issuing Bank with respect to Letters of Credit issued or to be issued by such Lender, and all references herein and in the other Loan Documents to the term "**Issuing Bank**" shall, with respect to such Letters of Credit, be deemed to refer to such Lender in its capacity as Issuing Bank, as the context shall require. Notwithstanding any provisions of this Agreement to the contrary, no Person shall be or become an Issuing Bank hereunder unless such Person is a Swiss Qualifying Bank.

(f) Existing Letters of Credit; Existing Aleris Letters of Credit.

(~~fi~~) ~~Existing Letters of Credit~~. On the Closing Date, (~~#1~~) each Existing Letter of Credit, to the extent outstanding, shall be automatically and without further action by the parties thereto deemed converted into Letters of Credit issued pursuant to this Section 2.18 for the account of the Loan Parties set forth on Schedule 2.18(a) and subject to the provisions hereof, and for this purpose fees in respect thereof pursuant to Section 2.05(c) shall be payable (in substitution for any fees set forth in the applicable letter of credit reimbursement agreements or applications relating to such Existing Letters of Credit, except to the extent that such fees are also payable pursuant to Section 2.05(c)) as if such Existing Letters of Credit had been issued on the Closing Date, (~~#2~~) the Lenders set forth on Schedule

2.18(a), or their designated Affiliates who are eligible to be Issuing Banks, shall be deemed to be the Issuing Bank with respect to each such Existing Letter of Credit, ~~(iii)~~ such Letters of Credit shall each be included in the calculation of LC Exposure and U.S. LC Exposure or European LC Exposure, as applicable, and ~~(iv)~~ all liabilities of the Loan Parties with respect to such Existing Letters of Credit shall constitute Obligations. ~~Notwithstanding the foregoing, the Loan Parties shall not be required to pay any additional issuance fees with respect to the issuance of such Existing Letter of Credit solely as a result of such letter of credit being converted to a Letter of Credit hereunder, it being understood that the fronting, participation and other fees set forth in Section 2.05(c) shall otherwise apply to such Existing Letters of Credit. No Existing Letter of Credit converted in accordance with this clause (f) shall be amended, extended or renewed except in accordance with the terms hereof.~~

(ii) At least 2 Business Days (or such shorter period as the Administrative Agent may agree in its discretion) prior to the Aleris Acquisition Closing Date, the Administrative Borrower shall deliver a certificate, in form and substance satisfactory to the Administrative Agent, signed by a Financial Officer of the Administrative Borrower designating any or all of the letters of credit issued under the Existing Aleris Credit Agreement that will remain outstanding after the Aleris Acquisition Closing Date as "Existing Aleris Letters of Credit" so long as (x) the issuer of such letter of credit is a Lender and an Aleris Issuing Bank, (y) such certificate describes each Existing Aleris Letter of Credit in specific detail and includes copies of each such letter of credit and all amendments, restatements and modifications thereto, and (z) such certificate certifies that, immediately after giving effect to the consummation of the Aleris Acquisition and the terms set forth in clause (iii) below, the Funding Conditions and the LC Conditions shall each be satisfied both immediately before and immediately after giving effect to clauses (iii)(3) and (iii)(4) below (which certification shall be accompanied by reasonably detailed calculations supporting the foregoing).

(iii) On the Aleris Acquisition Closing Date, immediately after giving effect to the consummation of the Aleris Acquisition, so long as (x) the Administrative Borrower has complied with clause (ii) above and (y) the Funding Conditions and the LC Conditions are satisfied both immediately before and immediately after giving effect to clauses (3) and (4) below, (1) each Existing Aleris Letter of Credit, to the extent outstanding, shall be automatically and without further action by the parties thereto deemed converted into Letters of Credit issued pursuant to this Section 2.18 for the account of the applicable Loan Parties and subject to the provisions hereof, and for this purpose fees in respect thereof pursuant to Section 2.05(c) shall be payable (in substitution for any fees set forth in the applicable letter of credit reimbursement agreements or applications relating to such Existing Aleris Letters of Credit, except to the extent that such fees are also payable pursuant to Section 2.05(c)) as if such Existing Aleris Letters of Credit had been issued under this Agreement on the Aleris Acquisition Closing Date, (2) subject to the terms and conditions of Section 2(b) of Amendment No. 2, each issuer of such letter of credit, to the extent that it is a Lender and an Aleris Issuing Bank, shall be deemed to be the Issuing Bank with respect to each Existing Aleris Letter of Credit issued by it, (3) the Existing Aleris Letters of Credit shall each be included in the calculation of LC Exposure and U.S. LC Exposure or European LC Exposure, as applicable, and (4) all liabilities of the Loan Parties with respect to such Existing Aleris Letters of Credit shall constitute Obligations.

(iv) Notwithstanding the foregoing, the Loan Parties shall not be required to pay any additional issuance fees with respect to the issuance of such Existing Letter of Credit or Existing Aleris Letter of Credit solely as a result of such letter of credit being converted to a Letter of Credit hereunder, it being understood that the fronting, participation and other fees set forth in Section 2.05(c) shall otherwise apply to such Existing Letters of Credit and Existing Aleris Letter of Credit. No Existing Letter of Credit or Existing Aleris Letter of Credit converted in accordance with this clause (f) shall be amended, extended or renewed except in accordance with the terms hereof, provided that no Existing Aleris Letter of Credit issued by JPMorgan Chase Bank, N.A. shall be amended, extended, renewed, increased or otherwise modified in any respect.

(g) Issuance Through Affiliates. At an Issuing Bank's discretion (with the prior consent of the ~~Parent Borrower~~ Designated Company, which shall not be unreasonably withheld), one or more Letters of Credit may be issued by an Affiliate of such Issuing Bank (in which case "Issuing Bank" shall, with respect to such Letter of Credit, mean such Affiliate). If and to the extent an Affiliate of the Issuing Bank issues a Letter of Credit such Affiliate shall be an express third party beneficiary of this Agreement with respect to this Section 2.18, and entitled to enforce its rights hereunder as if it were a party hereto.

(h) Other. Notwithstanding any provisions of this Agreement to the contrary, no Person shall be or become an Issuing Bank hereunder unless such Person is a Swiss Qualifying Bank. No Issuing Bank shall be under any obligation to issue any Letter of Credit if:

(i) any order, judgment or decree of any Governmental Authority or arbitrator shall by its terms purport to enjoin or restrain such Issuing Bank from issuing such Letter of Credit, or any requirement of Applicable Law applicable to such Issuing Bank or any request or directive (whether or not having the force of law) from any Governmental Authority with jurisdiction over such Issuing Bank shall prohibit, or request that such Issuing Bank refrain from, the issuance of letters of credit generally or such Letter of Credit in particular or shall impose upon such Issuing Bank with respect to such Letter of Credit any restriction, reserve or capital requirement (for which such Issuing Bank is not otherwise compensated hereunder) not in effect on the Closing Date, or shall impose upon such Issuing Bank any unreimbursed loss, cost or expense which was not applicable on the Closing Date and which such Issuing Bank in good faith deems material to it;

(ii) the issuance of such Letter of Credit would violate one or more policies of such Issuing Bank; or

(iii) where the Letter of Credit is a Standby Letter of Credit, if the beneficiary

of such Letter of Credit is resident in Ireland or, where the beneficiary is a legal person, its place of establishment to which the Letter of Credit relates is in Ireland, unless such Issuing Bank is duly authorized to carry on the business of issuing contracts of suretyship in Ireland (or is otherwise exempted under the laws of Ireland from the requirement to have any such authorization).

(i) Conflicts. In the event of a direct conflict between the provisions of this Section 2.18 and any provision contained in any LC Document, it is the intention of the parties hereto that such provisions be read together and construed, to the fullest extent possible, to be in concert with each other. In the event of any actual, irreconcilable conflict

that cannot be resolved as aforesaid, the terms and provisions of this Section 2.18 shall control and govern.

(j) Survival. The provisions of this Section 2.18 shall survive the termination of this Agreement and the repayment in full of the Secured Obligations with respect to any Letters of Credit that remain outstanding.

SECTION 2.19 Interest Act (Canada); Criminal Rate of Interest; Nominal Rate of Interest.

(a) Notwithstanding anything to the contrary contained in this Agreement or in any other Loan Document, solely to the extent that a court of competent jurisdiction finally determines that the calculation or determination of interest or any fee payable by any Canadian Loan Party in respect of the Obligations pursuant to this Agreement and the other Loan Documents shall be governed by the laws of any province of Canada or the federal laws of Canada, in no event shall the aggregate interest (as defined in Section 347 of the Criminal Code, R.S.C. 1985, c. C-46, as the same shall be amended, replaced or re-enacted from time to time, "Section 347") payable by the Canadian Loan Parties to the Agents or any Lender under this Agreement or any other Loan Document exceed the effective annual rate of interest on the Credit advances (as defined in Section 347) under this Agreement or such other Loan Document lawfully permitted under Section 347 and, if any payment, collection or demand pursuant to this Agreement or any other Loan Document in respect of Interest (as defined in Section 347) is determined to be contrary to the provisions of Section 347, such payment, collection or demand shall be deemed to have been made by mutual mistake of the Agents, the Lenders and the Canadian Loan Parties and the amount of such payment or collection shall be refunded by the relevant Agents and Lenders to the applicable Canadian Loan Parties. For the purposes of this Agreement and each other Loan Document to which the Canadian Loan Parties are a party, the effective annual rate of interest payable by the Canadian Loan Parties shall be determined in accordance with generally accepted actuarial practices and principles over the term of the loans on the basis of annual compounding for the lawfully permitted rate of interest and, in the event of dispute, a certificate of a Fellow of the Canadian Institute of Actuaries appointed by the Administrative Agent for the account of the Canadian Loan Parties will be conclusive for the purpose of such determination in the absence of evidence to the contrary.

(b) For the purposes of the Interest Act (Canada) and with respect to Canadian Loan Parties only:

(i) whenever any interest or fee payable by the Canadian Loan Parties is calculated using a rate based on a year of 360 days or 365 days, as the case may be, the rate determined pursuant to such calculation, when expressed as an annual rate, is equivalent to (x) the applicable rate based on a year of 360 days or 365 days, as the case may be, (y) multiplied by the actual number of days in the calendar year in which such rate is to be ascertained and (z) divided by 360 or 365, as the case may be; and

(ii) all calculations of interest payable by the Canadian Loan Parties under this Agreement or any other Loan Document are to be made on the basis of the nominal interest rate described herein and therein and not on the basis of effective yearly rates or on any other basis which gives effect to the principle of deemed reinvestment of interest.

The parties hereto acknowledge that there is a material difference between the stated nominal interest rates and the effective yearly rates of interest and that they are capable of making the calculations required to determine such effective yearly rates of interest.

SECTION 2.20 ~~intentionally omitted~~ Designation of Additional German Borrowers and U.S. Borrowers.

(a) The Designated Company may at any time and from time to time after the Aleris Acquisition Closing Date designate one or more Specified Aleris German Subsidiaries as a German Borrower, and one or more Specified Aleris U.S. Subsidiaries as a U.S. Borrower, in each case upon delivery to the Administrative Agent of a written request therefor not less than 20 Business Days (or such lesser period as the Administrative Agent may agree in its sole discretion) prior to the effective date of such designation. Upon receipt of such a request, the Administrative Agent shall promptly notify the Lenders and the Issuing Banks thereof. Such Person shall become a German Borrower or a U.S. Borrower, as applicable, for all purposes under this Agreement and the other Loan Documents on the date designated pursuant to this clause (a), subject to the satisfaction of the following conditions:

(i) subject to Section 5.11(i), the Agents, the Issuing Banks and the Lenders shall have received, with respect to each such Specified Aleris German Subsidiary and Specified Aleris U.S. Subsidiary so designated, at least five (5) Business Days prior to the date such Person becomes a German Borrower or a U.S. Borrower, as applicable, and the Administrative Agent shall be satisfied with, all OFAC/PEP searches and customary individual background checks for such Subsidiary, and all other documentation and other information required by regulatory authorities under applicable "know-your-customer" and anti-money laundering rules and regulations, including, without limitation, the Patriot Act and the Beneficial Ownership Regulation;

(ii) the Administrative Agent shall have received the results of a field

examination and inventory appraisal of the Accounts and Inventory of each such Specified Aleris German Subsidiary and Specified Aleris U.S. Subsidiary so designated, each in form and substance reasonably acceptable to the Administrative Agent, from Persons selected or retained by the Administrative Agent (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document);

(iii) each such Specified Aleris German Subsidiary and Specified Aleris U.S. Subsidiary so designated shall have executed (to the extent such document is required to be executed) and delivered to the Administrative Agent, in form and substance reasonably satisfactory to the Administrative Agent, each of the following:

(1) subject to the Agreed Guaranty and Security Principles, a

Joinder Agreement joining such Person to this Agreement as a Guarantor, and as

a German Borrower (in the case of a Specified Aleris German Subsidiary) or a U.S. Borrower (in the case of a Specified Aleris U.S. Subsidiary);

(2) subject to the Agreed Guaranty and Security Principles, Guarantees and Security Documents (or joinders or accessions thereto) substantially similar to the Guarantees and Security Documents entered into on or in connection with the Existing Credit Agreement Closing Date and the Aleris Acquisition Closing Date by Borrowers organized in the jurisdiction of organization or incorporation of such Person, together with any other Loan Documents reasonably requested by the Administrative Agent;

(3) a Perfection Certificate Supplement and the other documents, certificates, filings and opinions required to be delivered by Borrowers and Guarantors organized in the jurisdiction of organization or incorporation of such Person pursuant to Section 4.01 of this agreement and Section 6 of Amendment No. 2, with any references therein to the "Closing Date" and to the "Amendment Effective Date" being deemed to be a reference to the date that such Person becomes a German Borrower (in the case of a Specified Aleris German Subsidiary) or a U.S. Borrower (in the case of a Specified Aleris U.S. Subsidiary); and

(4) the Designated Company shall have delivered an updated Borrowing Base Certificate to the Administrative Agent based on the Borrowing Base Certificates most recently delivered pursuant to this Agreement, which Borrowing Base Certificate shall also demonstrate the effect of the inclusion of the Eligible Accounts and Eligible Inventory owned by such Person on the Total Borrowing Base and such other Borrowing Bases as the Administrative Agent may reasonably request.

SECTION 2.21 Representation to Swiss ~~Borrower~~Borrowers.

(a) Each Lender on the ~~Closing~~Amendment No. 2 Effective Date represents that it is a Swiss Qualifying Bank or a Swiss Non-Qualifying Bank as further indicated on Schedule 2.21 to Amendment No. 2. Each Lender represents to ~~the~~ Swiss ~~Borrower~~Borrowers on the date on which it becomes a party to this Agreement in its capacity as such whether it is a Swiss Qualifying Bank or a Swiss Non-Qualifying Bank, as indicated on the applicable Assignment and Assumption.

(b) Each Lender shall, if requested to do so by any Swiss Borrower, within ten (10) Business Days of receiving such request confirm, as at the date on which it gives such confirmation whether it is a Swiss Qualifying Bank or a Swiss Non-Qualifying Bank (or, if it requires a confirmation by the Swiss Federal Tax Administration in order to be able to give such confirmation, a request for such a confirmation shall be filed by the relevant Lender with the Swiss Federal Tax Administration within ten (10) Business Days of it receiving such request and, upon receipt of the required confirmation from the Swiss Federal Tax Administration, the necessary confirmation by the relevant Lender shall be made within ten (10) Business Days of such confirmation being received by it).

(c) Any Lender that ceases to be a Swiss Qualifying Bank shall provide written notice to Administrative Borrower and Administrative Agent at least twenty (20) Business Days' prior to the time that it ceases to be a Swiss Qualifying Bank. If as a result of such event the number of Swiss Non-Qualifying Banks under this Agreement exceeds the number ten, then, so long as no Significant Event of Default is in existence, Administrative Borrower shall have the right to request that the relevant Lender assign or transfer by novation all of its rights and obligations under this Agreement to an Eligible Assignee qualifying as a Swiss Qualifying Bank or another Lender qualifying as a Swiss Qualifying Bank, all in accordance with Section 11.04. The transferor Lender shall be entitled to receive, in cash, concurrently with such assignment, all amounts owed to it under the Loan Documents, including all principal, interest and fees through the date of assignment (including any amount payable pursuant to Section 2.13). The Administrative Agent shall have no responsibility for determining whether or not an entity is a Swiss Qualified Bank, but shall track the number of Lenders from time to time that were unable to represent that they were Swiss Qualifying Banks in order to determine whether the number of Swiss Non-Qualifying Banks under this Agreement exceeds the number ten; provided that the Administrative Agent shall have no liability for any determinations made hereunder unless such liability arises from its gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a nonappealable decision).

(d) This Section 2.21, Section 2.06(j), Section 5.15 and Section 11.04(f) shall apply accordingly to any Borrower (other than ~~the~~ Swiss ~~Borrower~~Borrowers), which is incorporated or established under the laws of, or for tax purposes resident in, Switzerland, or for tax purposes having a permanent establishment in Switzerland with which a Loan is effectively connected.

SECTION 2.22 Blocked Loan Parties. If a Loan Party would have been required to make any payment or perform any action under any provision of the Loan Documents but the relevant provision(s) (or any portion thereof) is (are) not enforceable against that Loan Party or for any other reason that Loan Party is unable to fulfill its obligations under the Loan Documents (a “**Blocked Loan Party**”), the Administrative Borrower may designate which Loan Party shall fulfill the Blocked Loan Party’s obligations, but only so long as the designated Loan Party is duly and promptly fulfilling such obligations, failing which all Loan Parties shall be jointly and severally liable for the performance thereof.

SECTION 2.23 Increase in Commitments.

(a) **Borrowers Request.** The Borrowers may by written notice to the Administrative Agent and each Lender elect to request prior to the Maturity Date, one or more increases to the existing Revolving Commitments by an amount not in excess of ~~\$500,000,000~~ \$750,000,000 in the aggregate; following the Amendment No. 2 Effective Date (which amount shall not be reduced by the amount of any Specified Incremental Commitments that become effective following the Amendment No. 2 Effective Date), each in a minimum amount of \$25,000,000 (and increments of \$1,000,000 above that minimum)

(each such increase, an “**Incremental Revolving Commitment**”). Such notice shall specify the date on which the Borrowers propose that the Incremental Revolving Commitments shall be effective (each, an “**Increase Effective Date**”), and the time period within which each Lender is requested to respond, which in each case shall be a date not less than ten (10) Business Days after the date on which such notice is delivered to the Administrative Agent and the Lenders of the applicable Class. Each Lender of such Class (other than Lenders subject to replacement pursuant to Section 2.16 or a Defaulting Lender) in its sole and absolute discretion may notify the Administrative Agent within such time period whether or not it agrees to increase its Commitment and, if so, whether by an amount equal to, greater than, or less than its Pro Rata Percentage of such requested increase. Any Lender not responding within such time period shall be deemed to have declined to increase its Commitment. The Administrative Agent shall notify the Administrative Borrower and each Lender of such Class of the Lenders’ responses to each request made hereunder. If the existing Lenders do not agree to the full amount of a requested Incremental Revolving Commitment, the Administrative Borrower may then invite a Lender or any Lenders to increase their Commitments or invite additional financial institutions (each, an “**Additional Lender**”) (reasonably satisfactory to Administrative Agent and solely to the extent permitted by Section 11.04 (including Section 11.04(h)) and each other applicable requirement hereof, including Sections 2.21 and 5.15) to become Lenders and provide Incremental Revolving Commitments pursuant to an Increase Joinder.

- (b) **Conditions.** The increased or new Commitments shall become effective, as of such Increase Effective Date; provided that:
- (i) each of the conditions set forth in Section 4.02 shall be satisfied;
 - (ii) no Default shall have occurred and be continuing or would result from the borrowings to be made on the Increase Effective Date;
 - (iii) after giving pro forma effect to the borrowings to be made on the Increase Effective Date and to any change in Consolidated EBITDA and any increase in Indebtedness resulting from the consummation of any Permitted Acquisition or other Investment or application of funds made with the proceeds of such borrowings, the Borrowers shall, as of such date, be in compliance with the covenant set forth in Section 6.10, to the extent applicable;
 - (iv) the Borrowers shall make any payments required pursuant to Section 2.12 or Section 2.13 in connection with any adjustment of Revolving Loans pursuant to Section 2.23(d);
 - (v) the Borrowers shall deliver or cause to be delivered any legal opinions or other documents reasonably requested by the Administrative Agent in connection with any such transaction;
 - (vi) any such increase, and the incurrence of Indebtedness pursuant thereto, shall be permitted by the Intercreditor Agreement; ~~and~~
 - (vii) if any Loan Party or any of its Subsidiaries owns or will acquire any Margin Stock, Borrowers shall deliver to each Agent an updated Form U-1 (with sufficient additional originals thereof for each Lender and each Issuing Bank), duly executed and delivered by the Borrowers, together with such other documentation as each Agent shall reasonably request, in order to enable each Agent, the Lenders, and the Issuing Banks to comply with any of the requirements under Regulation T, Regulation U or Regulation X; and
 - (viii) any such increase shall be permitted under the Senior ~~Notes~~ Note Documents and any other then existing Indebtedness of the Loan Parties and their Subsidiaries and any such increase shall not give rise to the obligation of any Loan Party or any of its Subsidiaries under the terms of the Senior ~~Notes~~ Note Documents or such other Indebtedness to grant any Lien to secure such Senior ~~Notes~~ Note Documents or other existing Indebtedness (other than any obligation to provide or confirm the security granted under the Term Loan ~~Facility Documents~~ in accordance with the Intercreditor Agreement).

(c) **Terms of New Loans and Commitments.** The terms and provisions of Loans made pursuant to Incremental Revolving Commitments shall be identical to the Revolving Loans of the same Class (subject to the payment of any customary arrangement, underwriting or similar fees that are paid to the arranger of such Incremental Revolving Commitments in its capacity as such). The increased or new

Commitments shall be effected by a joinder agreement (the “**Increase Joinder**”) executed by the Loan Parties, the Administrative Agent and each Lender and Additional Lender making such Incremental Revolving Commitment, in form and substance satisfactory to each of them. The Increase Joinder may, without the consent of any other Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the opinion of the Administrative Agent, to effect the provisions of this [Section 2.23](#) (including with respect to establishment of new Loans and Commitments as a first-in, last-out tranche, and to provide for class voting protections as described below). In addition, unless otherwise specifically provided herein, all references in Loan Documents to Revolving Loans shall be deemed, unless the context otherwise requires, to include references to Revolving Loans made pursuant to Incremental Revolving Commitments made pursuant to this Agreement, and all references in Loan Documents to Commitments of a Class shall be deemed, unless the context otherwise requires, to include references to Incremental Revolving Commitments of such Class made pursuant to this Agreement.

(d) Adjustment of Revolving Loans. Each of the Revolving Lenders having a Revolving Commitment of an applicable Class prior to such Increase Effective Date (the “**Pre-Increase Revolving Lenders**”) shall assign to any Revolving Lender which is acquiring a new or additional Revolving Commitment of such Class on the Increase Effective Date (the “**Post-Increase Revolving Lenders**”), and such Post-Increase Revolving Lenders shall purchase from each Pre-Increase Revolving Lender, at the principal amount thereof, such interests in the Revolving Loans of such Class and participation interests in LC Exposure and Swingline Loans of such Class outstanding on such Increase Effective Date as shall be necessary in order that, after giving effect to all such assignments and purchases, such Revolving Loans and participation interests in LC Exposure and Swingline Loans will be held by Pre-Increase Revolving Lenders and Post-Increase Revolving Lenders of such Class ratably in accordance with their Revolving Commitments of such Class after giving effect to such increased Revolving Commitments.

(e) Equal and Ratable Benefit. The Loans and Commitments established pursuant to this [Section 2.23](#) shall constitute Loans and Commitments under, and shall be entitled to all the benefits afforded by, this Agreement and the other Loan Documents, and shall, without limiting the foregoing, benefit equally and ratably from the Guarantees and security interests created by the Security Documents; provided that, at Administrative Borrower’s option and upon terms and conditions satisfactory to the Administrative Borrower and the Administrative Agent, (i) the application of payments hereunder may be revised to include such new Loans and Commitments on a first-in, last-out basis and (ii) the voting provisions hereof may be revised to provide class protection for the existing Loans and Commitments and any such first-in, last-out tranche. The Loan Parties shall take any actions reasonably required by the Administrative Agent to ensure and/or demonstrate that the Lien and security interests granted by the Security Documents continue to be perfected under the UCC, the PPSA or otherwise after giving effect to the establishment of any such new Commitments.

ARTICLE III

REPRESENTATIONS AND WARRANTIES

Each Loan Party represents and warrants to the Administrative Agent, the Collateral Agent, each Issuing Bank and each of the Lenders that:

SECTION 3.01 Organization; Powers. Each Company (a) is duly organized or incorporated (as applicable) and validly existing under the laws of the jurisdiction of its organization or incorporation (as applicable), (b) has all requisite organizational or constitutional power and authority to carry on its business as now conducted and to own and lease its property and (c) is qualified and in good standing (to the extent such concept is applicable in the applicable jurisdiction) to do business in every jurisdiction where such qualification is required, except in such jurisdictions where the failure to so qualify or be in good standing, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.02 Authorization; Enforceability. The Transactions [and the transactions contemplated by Amendment No. 2](#) to be entered into by each Loan Party are within such Loan Party’s organizational or constitutional powers and have been duly authorized by all necessary constitutional or organizational action on the part of such Loan Party. This Agreement has been duly executed and delivered by each Loan Party and constitutes, and each other Loan Document to which any Loan Party is to be a party, when executed and delivered by such Loan Party, will constitute, a legal, valid and binding obligation of such Loan Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency, reorganization, moratorium or other laws affecting creditors’ rights generally and subject to general principles of equity, regardless of whether considered in a proceeding in equity or at law.

SECTION 3.03 No Conflicts. The Transactions [and the transactions contemplated by Amendment No. 2](#) (a) do not require any consent or approval of, registration or filing with, or any other action by, any Governmental Authority, except (i) such as have been obtained or made and are in full force and effect, (ii) filings necessary to perfect Liens created by the Loan Documents (as reflected in the applicable Perfection Certificate) and (iii) consents, approvals, registrations, filings, permits or actions the failure to obtain or perform which could not reasonably be expected to result in a Material Adverse Effect, (b) will not violate the Organizational Documents of any Company, (c) will not violate any material requirement of Applicable Law, (d) will not violate or result in a default or require any consent or approval under any indenture, agreement or other instrument binding upon any Company or its property, or give rise to a right thereunder to require any payment to be made by any Company, except for violations, defaults or the creation of such rights that could not reasonably be expected to result in a Material Adverse Effect, and (e) will not result in the creation or imposition of any Lien on any property of any Company, except Liens created by the Loan Documents and Permitted Liens. The execution, delivery and performance of the Loan Documents will not violate, or result in a default under, or require any consent or approval under, the Senior Notes, the Senior Note Documents, or the Term Loan Documents. The Total Revolving Commitment and Obligations constitute Indenture Permitted Debt.

SECTION 3.04 Financial Statements; Projections.

(a) Historical Financial Statements. The Administrative Borrower has heretofore delivered to the Lenders the consolidated balance sheets and related statements of income, stockholders' equity and cash flows of ~~Parent~~the Canadian Borrower (i) as of and for the fiscal years ended March 31, ~~2013~~2017, and March 31, ~~2014~~2018, audited by and accompanied by the unqualified opinion of PricewaterhouseCoopers, independent public accountants, and (ii) as of and for the three-month ~~period~~periods ended June 30, ~~2014~~2018, September 30, 2018 and December 31, 2018, and for the comparable period of the preceding fiscal year, in each case, certified by the chief financial officer of ~~Parent~~the Canadian Borrower. Such financial statements and all financial statements delivered pursuant to Section 5.01(a) and Section 5.01(b) have been prepared in accordance with U.S. GAAP and present fairly in all material respects the financial condition and results of operations and cash flows of ~~Parent Borrower~~the Designated Company as of the dates and for the periods to which they relate.

(b) No Liabilities; No Material Adverse Effect. Except as set forth in the most recent financial statements referred to in Section 3.04(a), as of the ClosingAmendment No. 2 Effective Date there are no liabilities of any Company of any kind, whether accrued, contingent, absolute, determined, determinable or otherwise, which could reasonably be expected to result in a Material Adverse Effect, other than liabilities under the Loan Documents, the Term Loan Documents and the Senior Notes. Since March 31, ~~2017~~2018, there has been no event, change, circumstance or occurrence that, individually or in the aggregate, has had or could reasonably be expected to result in a Material Adverse Effect.

(c) [intentionally omitted].

(d) Forecasts. The forecasts of financial performance of the ~~Parent Borrower~~Designated Company and its subsidiaries furnished to the Lenders have been prepared in good faith by the Loan Parties and based on assumptions believed by the Loan Parties to be reasonable, it being understood that any such forecasts may vary from actual results and such variations may be material.

SECTION 3.05 Properties.

(a) Generally. Each Company has good title to, valid leasehold interests in, or license of, all its property material to its business, free and clear of all Liens except for Permitted Liens. The property that is material to the business of the Companies, taken as a whole, (i) is in good operating order, condition and repair in all material respects (ordinary wear and tear excepted) and (ii) constitutes all the property which is required for the business and operations of the Companies as presently conducted.

(b) Real Property. Schedules 8(a) and 8(b) to the Perfection Certificate ~~dated the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date contain a true and complete list of each interest in Real Property (i) owned by any Loan Party as of the ClosingAmendment No. 2 Effective Date having fair market value of \$1,000,000 or more and describes the type of interest therein held by such Loan Party and whether such owned Real Property is leased to a third party and (ii) leased, subleased or otherwise occupied or utilized by any Loan Party, as lessee, sublessee, franchisee or licensee, as of the ClosingAmendment No. 2 Effective Date having annual rental payments of \$1,000,000 or more and describes the type of interest therein held by such Loan Party.

(c) No Casualty Event. No Company has as of the ClosingAmendment No. 2 Effective Date received any notice of, nor has any knowledge of, the occurrence or pendency or contemplation of any Casualty Event affecting all or any material portion of its property.

(d) Collateral. Each Company owns or has rights to use all of the Collateral used in, necessary for or material to each Company's business as currently conducted, except where the failure to have such ownership or rights of use could not reasonably be expected to have a Material Adverse Effect. The use by each Company of such Collateral does not infringe on the rights of any person other than such infringement which could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect. No claim has been made and remains outstanding that any Company's use of any Collateral does or may violate the rights of any third party that could, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect.

SECTION 3.06 Intellectual Property.

(a) Ownership/No Claims. Each Loan Party owns, or is licensed to use, all patents, trademarks, copyrights and other intellectual property (including intellectual property in software, mask works, inventions, designs, trade names, service marks, technology, trade secrets, proprietary information and data, domain names, know-how and processes) necessary for the conduct of such Loan Party's business as currently conducted ("**Intellectual Property**"), except for those the failure to own or license which, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect. As of the ClosingAmendment No. 2 Effective Date, no material claim has been asserted and is pending by any person, challenging or questioning the validity of any Loan Party's Intellectual Property or the validity or enforceability of any such Intellectual Property, nor does any Loan Party know of any valid basis for any such claim. The use of any Intellectual Property by each Loan Party, and the conduct of each Loan Party's business as currently conducted, does not infringe or otherwise violate the rights of any third party in respect of Intellectual Property, except for such claims and infringements that, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect.

(b) Registrations. Except pursuant to non-exclusive licenses and other nonexclusive use agreements entered into by each Loan Party in the ordinary course of business, and except as set forth on Schedule 12(c) to the Perfection Certificate most recently delivered on or prior to the Amendment No. 2 Effective Date, on and as of the ClosingAmendment No. 2 Effective Date each Loan Party owns and possesses the right to use and has not authorized or enabled any other person to use, any Intellectual Property listed on any schedule to the relevant Perfection Certificate or any other Intellectual Property that is material to its business, except for such authorizations and enablements as could not

reasonably be expected to result in a Material Adverse Effect. All registrations listed on Schedule 12(a) and 12(b) to the Perfection Certificate are valid and in full force and effect, in each case, except where the absence of such validity or full force and effect, individually or collectively, could not reasonably be expected to have a Material Adverse Effect.

(c) No Violations or Proceedings. To each Loan Party's knowledge, on and as of the ~~Closing~~Amendment No. 2 Effective Date, (i) there is no material infringement or other violation by others of any right of such Loan Party with respect to any Intellectual Property listed on any schedule to the relevant Perfection Certificate, or any other Intellectual Property that is material to its business, except as may be set forth on Schedule 3.06(c) to Amendment No. 2, and (ii) no claims are pending or threatened to such effect except as set forth on Schedule 3.06(c) to Amendment No. 2.

SECTION 3.07 Equity Interests and Subsidiaries.

(a) Equity Interests. Schedules 1(a) and 10 to the Perfection Certificate ~~dated the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date set forth a list of (i) all the Subsidiaries of Holdings and their jurisdictions of organization as of the ~~Closing~~Amendment No. 2 Effective Date and (ii) the number of each class of its Equity Interests authorized, and the number outstanding, on the ~~Closing~~Amendment No. 2 Effective Date and the number of shares covered by all outstanding options, warrants, rights of conversion or purchase and similar rights at the ~~Closing~~Amendment No. 2 Effective Date. As of the ~~Closing~~Amendment No. 2 Effective Date, all Equity Interests of each Company held by Holdings or a Subsidiary thereof are duly and validly issued and are fully paid and nonassessable, and, other than the Equity Interests of Holdings, are owned by Holdings, directly or indirectly through Wholly Owned Subsidiaries except as indicated on Schedules 1(a) and 10 to the Perfection Certificate most recently delivered on or prior to the Amendment No. 2 Effective Date. At all times prior to a Qualified ~~Parent~~Canadian Borrower IPO, 100% of the Equity Interests of the ~~Parent~~Canadian Borrower will be owned directly by Holdings. As of the Closing, and 100% of the Equity Interests of the other Borrowers shall be owned directly or indirectly by Holdings (or, in the case of each Borrower other than Designated Holdco, on and after the Designated Holdco Effective Date, will be owned directly or indirectly by Designated Holdco). At all times after a Qualified Canadian Borrower IPO, more than 50% of the voting power of the total outstanding Voting Stock of each Borrower will be owned directly or indirectly by Hindalco. As of the Amendment No. 2 Effective Date, each Loan Party is the record and beneficial owner of, and has good and marketable title to, the Equity Interests pledged by it under the Security Documents, free of any and all Liens, rights or claims of other persons, except Permitted Liens, and as of the ~~Closing~~Amendment No. 2

Effective Date there are no outstanding warrants, options or other rights to purchase, or shareholder, voting trust or similar agreements outstanding with respect to, or property that is convertible into, or that requires the issuance or sale of, any such Equity Interests ~~other than with respect to the Forward Share Sale Agreement~~.

(b) No Consent of Third Parties Required. Except as have previously been obtained, no consent of any person including any other general or limited partner, any other member of a limited liability company, any other shareholder or any other trust beneficiary is necessary in connection with the creation, perfection or First Priority (subject to the Intercreditor Agreement) status of the security interest of the Collateral Agent in any Equity Interests pledged to the Collateral Agent for the benefit of the Secured Parties under the Security Documents or the exercise by the Collateral Agent of the voting or other rights provided for in the Security Documents or the exercise of remedies in respect thereof, other than any restrictions on transfer of the Equity Interests in NKL or its direct parents, 4260848 Canada Inc., 4260856 Canada Inc., and 8018227 Canada Inc., imposed by any lock-up or listing agreement, rule or regulation in connection with any listing or offering of Equity Interests in NKL to the extent required by Applicable Law or listing or stock exchange requirements, and other than any share transfer restrictions pursuant to articles 249 and following of the Belgian Companies Code.

(c) Organizational Chart. An accurate organizational chart, showing the ownership structure of Holdings, Borrowers and each Subsidiary on the ~~Closing~~Amendment No. 2 Effective Date is set forth on Schedule 10 to the Perfection Certificate ~~dated the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date.

SECTION 3.08 Litigation; Compliance with Laws. There are no actions, suits or proceedings at law or in equity by or before any Governmental Authority now pending or, to the knowledge of any Company, threatened against or affecting any Company or any business, property or rights of any Company (i) that involve any Loan Document or (ii) as to which there is a reasonable possibility of an adverse determination and that, if adversely determined, could reasonably be expected, individually or in the aggregate, to result in a Material Adverse Effect. No Company or any of its property is in violation of, nor will the continued operation of its property as currently conducted violate, any Applicable Law (including any zoning or building ordinance, code or approval or any building permits) or any restrictions of record or agreements affecting any Company's Real Property or is in default with respect to any requirement of Applicable Law, where such violation or default, individually or in the aggregate, could reasonably be expected to result in a Material Adverse Effect. The Loan Parties have implemented and ~~maintains~~maintain in effect policies and procedures designed to ensure compliance by the Loan Parties, their Subsidiaries, and their respective directors, officers, employees and agents with applicable Anti-Corruption Laws, and the Loan Parties and their Subsidiaries are in compliance with applicable Anti-Corruption Laws in all material respects.

SECTION 3.09 Agreements. No Company is a party to any agreement or instrument or subject to any corporate or other constitutional restriction that has resulted or could reasonably be expected to result in a Material Adverse Effect. No Company is in default in any manner under any provision of any indenture or other agreement or instrument evidencing Indebtedness, or any other agreement or instrument to which it is a party or by which it or any of its property is or may be bound, where such default could reasonably be expected to result in a Material Adverse Effect. There is no existing default under any Organizational Document of any Company or any event which, with the giving of notice or passage of time or both, would constitute a default by any party thereunder that could reasonably be expected to have a Material Adverse Effect. No event or circumstance has occurred or exists that constitutes a Default or Event of Default.

SECTION 3.10 Federal Reserve Regulations. No Company is engaged principally, or as one of its important activities, in the business of extending credit for the purpose of ~~buying~~purchasing or carrying Margin Stock. No part of the proceeds of any Loan or any Letter of Credit will be used, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry any Margin Stock or to extend credit to others for the purpose of purchasing or carrying any Margin Stock, or for any purpose ~~that entails a violation of,~~ in the case of each of the foregoing, in a manner that violates or that is inconsistent with, the provisions of the regulations of the Board, including Regulation T, U or X. The pledge of the Securities Collateral pursuant to the Security Documents does not violate such regulations.

SECTION 3.11 Investment Company Act. No Company is an “investment company” or a company “controlled” by an “investment company,” as defined in, or subject to regulation under, the Investment Company Act of 1940, as amended.

SECTION 3.12 Use of Proceeds. The Borrowers will use the proceeds of the Revolving Loans and Swingline Loans (a) on and after the Closing Date for ongoing working capital needs and other proper corporate purposes (including to effect Permitted Acquisitions and Dividends permitted hereunder) and (b) for payment of fees, premiums and expenses in connection with the Transactions and the transactions contemplated by Amendment No. 2.

SECTION 3.13 Taxes. Each Company has (a) timely filed or caused to be timely filed all material Tax Returns required by Applicable Law to have been filed by it and (b) duly and timely paid, collected or remitted or caused to be duly and timely paid, collected or remitted all material Taxes due and payable, collectible or remittable by it and all assessments received by it, except Taxes (i) that are being contested in good faith by appropriate proceedings and for which such Company has set aside on its books adequate reserves in accordance with U.S. GAAP or other applicable accounting rules and (ii) which could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect. Each Company has made adequate provision in accordance with U.S. GAAP or other applicable accounting rules for all material Taxes not yet due and payable. No Company has received written notice of any proposed or pending tax assessments, deficiencies or audits that could be reasonably expected to, individually or in the aggregate, result in a Material Adverse Effect. No Company has ever been a party to any understanding or arrangement constituting a “tax shelter” within the meaning of Section 6111(c), Section 6111(d) or Section 6662(d)(2)(C)(iii) of the Code, or has ever “participated” in a “reportable transaction” within the meaning of Treasury Regulation Section 1.6011-4, except as could not be reasonably expected to, individually or in the aggregate, result in a Material Adverse Effect.

SECTION 3.14 No Material Misstatements. The written information (including the Confidential Information Memorandum), reports, financial statements, certificates, exhibits or schedules furnished by or on behalf of any Company to any Agent or any Lender in connection with the negotiation of any Loan Document or included therein or delivered pursuant thereto, taken as a whole, did not and does not contain any material misstatement of fact and, taken as a whole, did not and does not omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were or are made, not materially misleading in their presentation of Holdings, the ~~Parent~~ Borrower Designated Company, and their Subsidiaries taken as a whole as of the date such information is dated or certified; provided that to the extent any such information, report, financial statement, exhibit or schedule was based upon or constitutes a forecast or projection, each Loan Party represents only that it was prepared in good faith and based on assumptions believed by the applicable Loan Parties to be reasonable.

SECTION 3.15 Labor Matters. As of the ~~Closing~~Amendment No. 2 Effective Date, there are no material strikes, lockouts or labor slowdowns against any Company pending or, to the knowledge of any Company, threatened in writing. The hours worked by and payments made to employees of any Company have not been in violation of the Fair Labor Standards Act of 1938, as amended, or any other applicable federal, state, provincial, local or foreign law dealing with such matters in any manner which could reasonably be expected to result in a Material Adverse Effect. All payments due from any Company, or for which any claim may be made against any Company, on account of wages and employee health and welfare insurance and other benefits, have been paid or accrued as a liability on the books of such Company except where the failure to do so could not reasonably be expected to result in a Material Adverse Effect. The consummation of the Transactions will not give rise to any right of termination or right of renegotiation on the part of any union under any collective bargaining agreement to which any Company is bound, except as could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.16 Solvency. (i) ~~(x)~~ At the time of and immediately after the consummation of the ~~Transactions~~transactions to occur on the ~~Closing~~Amendment No. 2 Effective Date and after giving effect to the application of the proceeds of each Loan made on such date and the operation of the Contribution, Intercompany, Contracting and Offset Agreement, and (y) after giving effect to the consummation of the Aleris Acquisition on the Aleris Acquisition Closing Date, (a) the fair value of the assets of each Loan Party (individually and on a consolidated basis with its Subsidiaries) will exceed its debts and liabilities, subordinated, contingent, prospective or otherwise; (b) the present fair saleable value of the property of each Loan Party (individually and on a consolidated basis with its Subsidiaries) will be greater than the amount that will be required to pay the probable liability of its debts and other liabilities, subordinated, contingent, prospective or otherwise, as such debts and other liabilities become absolute and matured; (c) each Loan Party (individually and on a consolidated basis with its Subsidiaries) will be able to pay its debts and liabilities, subordinated, contingent, prospective or otherwise, as such debts and liabilities become absolute and matured; (d) each Loan Party (individually and on a consolidated basis with its Subsidiaries) will not have unreasonably small capital with which to conduct its business in which it is engaged as such business is now conducted and is proposed to be conducted following the Closing Date; and (e) each Loan Party is not “insolvent” as such term is defined under any Debtor Relief Laws of any jurisdiction in which any Loan Party is organized or incorporated (as applicable), or otherwise unable to pay its debts as they fall due.

(ii) At the time of and immediately following the making of each Loan and after giving effect to the application of the proceeds of each Loan and the operation of the Contribution, Intercompany, Contracting and Offset Agreement, (a) the fair value of the assets of each Borrower, Borrowing Base Guarantor and Receivables Seller (for purposes of this Section 3.16, a “Principal Loan Party”) (individually and on a consolidated basis with its Subsidiaries) will exceed its debts and liabilities, subordinated, contingent, prospective or otherwise; (b) the present fair saleable value of the property of each Principal Loan Party (individually and on a

consolidated basis with its Subsidiaries) will be greater than the amount that will be required to pay the probable liability of its debts and other liabilities, subordinated, contingent, prospective or otherwise, as such debts and other liabilities become absolute and matured; (c) each Principal Loan Party (individually and on a consolidated basis with its Subsidiaries) will be able to pay its debts and liabilities, subordinated, contingent, prospective or otherwise, as such debts and liabilities become absolute and matured; (d) each Principal Loan Party (individually and on a consolidated basis with its Subsidiaries) will not have unreasonably small capital with which to conduct its business in which it is engaged as such business is now conducted and is proposed to be conducted following the Closing Date; and (e) each Principal Loan Party is not “insolvent” as such term is defined under any Debtor Relief Laws of any jurisdiction in which such Principal Loan Party is organized or incorporated (as applicable), or otherwise unable to pay its debts as they fall due.

SECTION 3.17 Employee Benefit Plans. Each Company and its ERISA Affiliates is in compliance in all material respects with the applicable provisions of ERISA and the Code and the regulations and published interpretations thereunder except for such non-compliance that in the aggregate would not have a Material Adverse Effect. No ERISA Event has occurred or is reasonably expected to occur that, when taken together with all other such ERISA Events, could reasonably be expected to result in a Material Adverse Effect or the imposition of a Lien on any of the property of any Company. The present value of all accumulated benefit obligations of all underfunded Plans (based on the assumptions used in the most recent actuarial valuations used for the respective Plans) did not, as of the date of the most recent financial statements reflecting such amounts, exceed the fair market value of the property of all such underfunded Plans in an amount which could reasonably be expected to have a Material Adverse Effect. Using actuarial assumptions and computation methods consistent with subpart I of subtitle E of Title IV of ERISA, the aggregate liabilities of each Company or its ERISA Affiliates to all Multiemployer Plans in the event of a complete withdrawal therefrom, as of the close of the most recent fiscal year of each such Multiemployer Plan, could not reasonably be expected to result in a Material Adverse Effect.

Schedule 3.17 to Amendment No. 2 lists all of the Canadian Pension Plans. Except as disclosed in Schedule 3.17 to Amendment No. 2 or hereafter disclosed to the Administrative Agent, none of the Canadian Pension Plans are Canadian Defined Benefit Plans. The hypothetical wind-up deficiency, going concern deficiency and solvency deficiency of each Canadian Pension Plan that is a Canadian Defined Benefit Plan as of the date of the most recently filed actuarial valuation is set out in Schedule 3.17 to Amendment No. 2 or has otherwise been disclosed to the Administrative Agent. With respect to any Canadian Pension Plan, to the best of the knowledge of any Company, except as would not, individually and in the aggregate, reasonably be expected to have a Material Adverse Effect: (i) the Canadian Pension Plans are duly registered under all applicable Canadian and provincial pension benefits legislation, (ii) all obligations of any Borrower or Guarantor required to be performed in connection with the Canadian Pension Plans or the funding agreements therefor have been performed in a timely fashion and there are no outstanding disputes concerning the assets held pursuant to any such funding agreement, (iii) all contributions or premiums required to be made by any Borrower or Guarantor to the Canadian Pension Plans have been made in a timely fashion in accordance with the terms of the Canadian Pension Plans and applicable laws and regulations, (iv) all employee contributions to the Canadian Pension Plans required to be made by way of authorized payroll deduction have been properly withheld by each Borrower or Guarantor and fully paid into the Canadian Pension Plans in a timely fashion in accordance with the terms of the Canadian Pension Plans and applicable laws and regulations, (v) all reports and disclosures relating to the Canadian Pension Plans required by any Applicable Laws have been filed or distributed in a timely fashion, (vi) no amount is due and owing by any of the Canadian Pension Plans under the Income Tax Act (Canada) or any provincial taxation or pension benefits statute, (vii) none of the Canadian Pension Plans is the subject of an investigation, proceeding, action or claim and there exists no state of fact which after notice or lapse of time or both would reasonably be expected to give rise to any such proceedings, (viii) no trust, statutory deemed trust or Lien has arisen or been imposed on any Borrower or Guarantor or its property in connection with any Canadian Pension Plan (except deemed trusts and Liens arising in the ordinary course under pension benefits statutes absent any wind up or partial wind up or failure to make a contribution to a Canadian Pension Plan when due, including in respect of employee contributions not yet remitted to a Canadian Pension Plan), and (ix) none of the ~~Borrower~~Borrowers or Guarantors contributes to, or has any obligation to contribute to, any pension plan required to be registered under Canadian federal or provincial law that is not maintained or administered by the ~~Borrower~~Borrowers or Guarantors or any of their Affiliates (other than the Canada Pension Plan or the Quebec Pension Plan as maintained by the Government of Canada or the province of Quebec).

To the extent applicable, each Foreign Plan has been maintained in compliance with its terms and with the requirements of Applicable Law and has been maintained, where required, in good standing with applicable Governmental Authority and Taxing Authority, except for such non-compliance that in the aggregate would not have a Material Adverse Effect. No Company has incurred any obligation in connection with the termination of or withdrawal from any Foreign Plan, except to the extent of liabilities which could not reasonably be expected to have a Material Adverse Effect. Each Foreign Plan that is required to be funded is funded in accordance with the requirements of Applicable Law, and with respect to each Foreign Plan that is not required to be funded, the obligations of such Foreign Plan are properly accrued in the financial statements of the ~~Parent Borrower~~Designated Company and its Subsidiaries, in each case in an amount that could not reasonably be expected to have a Material Adverse Effect.

Except as specified on Schedule 3.17 to Amendment No. 2, (i) no Company is or has at any time been an employer (for the purposes of Sections 38 to 51 of the Pensions Act 2004) of an occupational pension scheme which is not a money purchase scheme (both terms as defined in the Pensions Schemes Act 1993), and (ii) no Company is or has at any time been “connected” with or an “associate” of (as those terms are used in Sections 39 and 43 of the Pensions Act 2004) such an employer.

SECTION 3.18 Environmental Matters.

(a) Except as, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect:

(i) The Companies and their businesses, operations and Real Property are in compliance with, and the Companies have no liability under, any applicable Environmental Law;

(ii) The Companies have obtained all Environmental Permits required for the conduct of their businesses and operations, and the ownership, operation and use of their property, under Environmental Law, and all such Environmental Permits are valid and in good standing;

(iii) There has been no Release or threatened Release of Hazardous Material on, at, under or from any Real Property or facility presently or formerly owned, leased or operated by the Companies or their predecessors in interest that could reasonably be expected to result in liability of the Companies under any applicable Environmental Law;

(iv) There is no Environmental Claim pending or, to the knowledge of any Company, threatened against the Companies, or relating to the Real Property currently or formerly owned, leased or operated by the Companies or their predecessors in interest or relating to the operations of the Companies, and, to the knowledge of any Company, there are no actions, activities, circumstances, conditions, events or incidents that could reasonably be expected to form the basis of such an Environmental Claim;

(v) No Lien has been recorded or, to the knowledge of any Company, threatened under any Environmental Law with respect to any Real Property or other assets of the Companies;

(vi) The execution, delivery and performance of this Agreement, Amendment No. 2 and the consummation of the transactions contemplated hereby and thereby will not require any notification, registration, filing, reporting, disclosure, investigation, remediation or cleanup pursuant to any Governmental Real Property Disclosure Requirements or any other applicable Environmental Law; and

(vii) No person with an indemnity or contribution obligation to the Companies relating to compliance with or liability under Environmental Law is in default with respect to such obligation.

(b) As of the ~~Closing~~Amendment No. 2 Effective Date:

(i) Except as could not reasonably be expected to have a Material Adverse Effect, no Company is obligated to perform any action or otherwise incur any expense under Environmental Law pursuant to any order, decree, judgment or agreement by which it is bound or has assumed by contract, agreement or operation of law, and no Company is conducting or financing any Response pursuant to any Environmental Law with respect to any Real Property or any other location; and

(ii) No Real Property or facility owned, operated or leased by the Companies and, to the knowledge of the Companies, no Real Property or facility formerly owned, operated or leased by the Companies or any of their predecessors in interest is (i) listed or proposed for listing on the National Priorities List promulgated pursuant to CERCLA, or (ii) listed on the Comprehensive Environmental Response, Compensation and Liability Information System promulgated pursuant to CERCLA and is reasonably likely to result in any material liability to any Company, or (iii) included on any other publicly available list of contaminated sites maintained by any Governmental Authority analogous to CERCLA or the Resource Conservation and Recovery Act, 42 U.S.C. §6901 et seq., including any such list relating to the management or clean-up of petroleum and is reasonably likely to result in any material liability to a Company.

SECTION 3.19 Insurance ~~Schedule 3.19~~The Amendment No. 2 Insurance Disclosure

Letter sets forth a true and correct description of all insurance policies maintained by each Company as of the ~~Closing~~Amendment No. 2 Effective Date. All insurance maintained by the Companies to the extent required by Section 5.04 is in full force and effect, and all premiums thereon have been duly paid. As of the ~~Closing~~Amendment No. 2 Effective Date, no Company has received notice of violation or cancellation thereof, the Mortgaged Property, and the use, occupancy and operation thereof, comply in all material respects with all Insurance Requirements, and there exists no material default under any Insurance Requirement. Each Company has insurance in such amounts and covering such risks and liabilities as are customary for companies of a similar size engaged in similar businesses in similar locations.

SECTION 3.20 Security Documents.

(a) U.S. Security Agreement. ~~The~~Each of the U.S. Security ~~Agreement~~Agreements is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, when (i) financing statements and other filings in appropriate form are filed in the offices specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date and (ii) upon the taking of possession or control by the Collateral Agent of the Security Agreement Collateral with respect to which a security interest may be perfected only by possession or control (which possession or control shall be given to the Collateral Agent to the extent possession or control by the Collateral Agent is required by each Security Agreement), the Liens created by ~~the~~such Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral (other than such Security Agreement Collateral in which a security interest cannot be

perfected under the UCC as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(b) Canadian Security Agreement. Each of the Canadian Security Agreements is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, when PPSA financing statements and other filings in appropriate form are filed in the offices specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by such Canadian Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under the PPSA as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(c) U.K. Security Agreement. ~~The Each of the~~ U.K. Security ~~Agreement~~ Agreements is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registration specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~the such~~ U.K. Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(d) Swiss Security Agreement. ~~The Each of the~~ Swiss Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~the such~~ Swiss Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(e) German Security Agreement. ~~The Each of the~~ German Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, or in the case of accessory security, in favor of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~the such~~ German Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(f) Irish Security Agreement. ~~The Each of the~~ Irish Security Agreement is effective to create in favor of the Collateral Agent for the benefit of and as trustee for the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~the such~~ Irish Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(g) Brazilian Security Agreement. Each Brazilian Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~each of the such~~ Brazilian Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(h) Dubai Security Agreement. Each Dubai Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~ most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by ~~each of the such~~ Dubai Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(i) Belgian and Dutch Security Agreements. On and after the Aleris Acquisition Closing Date:

(i) ~~Madeira~~Each Belgian Security Agreement. Each Madeira Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the ~~relevant~~ Perfection Certificate ~~as in effect on the Closing Date~~delivered by the applicable Belgian Guarantor at the time such Person became a Loan Party hereunder, the Liens created by each of the ~~Madeira~~Belgian Security Agreement Agreements shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(ii) Each Dutch Security Agreement is effective to create in favor of the Collateral Agent for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the Perfection Certificate delivered by the applicable Dutch Guarantor at the time such Person became a Loan Party hereunder, the Liens created by each of the Dutch Security Agreements shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(j) French Security Agreement. Each French Security Agreement is effective to create in favor of the French Collateral Agent for its benefit (as creditor under the Parallel Debt provision set forth in Section 11.24) and/or for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, the Security Agreement Collateral referred to therein and, upon the registrations, recordings and other actions specified on Schedule 7 to the relevant Perfection Certificate ~~as in effect on the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date, the Liens created by each of the French Security ~~Agreement~~Agreements shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in the Security Agreement Collateral referred to therein (other than such Security Agreement Collateral in which a security interest cannot be perfected under Applicable Law as in effect at the relevant time in the relevant jurisdiction), in each case subject to no Liens other than Permitted Liens.

(k) Intellectual Property Filings. When the (i) financing statements and other filings in appropriate form referred to on Schedule 7 to the relevant Perfection Certificate have been made, and (ii) U.S. Security Agreement or a short form thereof is filed in the United States Patent and Trademark Office and the United States Copyright Office, the Liens created by such Security Agreement shall constitute valid, perfected First Priority Liens on, and security interests in, all right, title and interest of the grantors thereunder in Patents and Trademarks (each as defined in such Security Agreement) that are registered or applied for by any Loan Party with the United States Patent and Trademark Office or Copyrights (as defined in such Security Agreement) registered or applied for by any Loan Party with the United States Copyright Office, as the case may be, in each case subject to no Liens other than Permitted Liens.

(l) Mortgages. Each Mortgage (other than a Mortgage granted by a U.K. Borrower or a U.K. Guarantor) is effective to create, in favor of the Collateral Agent, for its benefit and the benefit of the Secured Parties, legal, valid, perfected and enforceable First Priority Liens on, and security interests in, all of the Loan Parties' right, title and interest in and to the Mortgaged Properties thereunder and the proceeds thereof, subject only to Permitted Liens, and when such Mortgages are filed in the offices specified on Schedule 8(a) to the applicable Perfection Certificates ~~dated the Closing~~most recently delivered on or prior to the Amendment No. 2 Effective Date (or, in the case of any Mortgage executed and delivered after the date thereof in accordance with the provisions of Section 5.11 and Section 5.12, when such Mortgage is filed in the offices specified in the local counsel opinion delivered with respect thereto in accordance with the provisions of Section 5.11 and Section 5.12), the Mortgages shall constitute First Priority fully perfected Liens on, and security interests in, all right, title and interest of the Loan Parties in the Mortgaged Properties and the proceeds thereof, in each case prior and superior in right to any other person, other than Permitted Liens.

The Mortgages granted by ~~the~~each U.K. Borrower and each applicable U.K. Guarantor under the relevant U.K. Security Agreement are effective to create in favor of the Collateral Agent, for the ratable benefit of the Secured Parties, legal, valid and enforceable Liens on all of each such Loan Party's right, title and interest in and to the Mortgaged Property thereunder and the proceeds thereof, and when the Mortgages are filed with the Land Registry, the Mortgages shall constitute fully perfected First Priority Liens on, and security interest in, all right, title and interest of ~~the~~each applicable U.K. Borrower and each applicable U.K. Guarantor in such Mortgaged Property and the proceeds thereof, in each case prior and superior in right to any other Person, other than with respect to the rights of Persons pursuant to Permitted Liens until terminated in accordance with the terms hereof.

(m) Valid Liens. Each Security Document delivered pursuant to Amendment No. 2, Section 5.11, Section 5.12 and Section 5.16 will, upon execution and delivery thereof, be effective to create in favor of the Collateral Agent, for the benefit of the Secured Parties, legal, valid and enforceable Liens on, and security interests in, all of the Loan Parties' right, title and interest in and to the Collateral thereunder, and (i) when all appropriate filings, registrations or recordings and other actions set forth in the relevant Perfection Certificate are made in the appropriate offices as may be required under Applicable Law and (ii) upon the taking of possession or control by the Collateral Agent of such Collateral with respect to which a security interest may be perfected only by possession or control (which possession or control shall be given to the Collateral Agent to the extent required by any Security Document), such Security Document will constitute First Priority fully perfected

Liens on, and security interests in, all right, title and interest of the Loan Parties in such Collateral, in each case subject to no Liens other than the applicable Permitted Liens.

(n) Receivables Purchase Agreement. The Initial German Receivables Purchase Agreement, ~~each Swiss Receivables Purchase Agreement~~, and, upon execution and delivery thereof, each other Receivables Purchase Agreement, is in full force and effect. Each representation and warranty under ~~any~~each Receivables Purchase Agreement of each Loan Party party thereto is true and correct on and as of the date made thereunder. No "Termination Event" (as defined therein) has occurred under any Receivables Purchase Agreement.

SECTION 3.21 Material Indebtedness Documents. Schedule 3.21 to Amendment No. 2 lists, as of the ClosingAmendment No. 2 Effective Date, (i) each material ~~New~~ Senior Note Document, (ii) each material Term Loan Document, and (iii) each material agreement, certificate, instrument, letter or other document evidencing any other Material Indebtedness, and the Lenders have been furnished true and complete copies of each of the foregoing.

SECTION 3.22 Sanctions. No Credit Party and none of its Restricted Subsidiaries or, to each Credit Party's knowledge, their respective Related Parties (a) is a Sanctioned Person, (b) is controlled by or is acting on behalf of a Sanctioned Person, (c) is under investigation for an alleged breach of Sanction(s) by a governmental authority that enforces Sanctions, or (d) will fund any repayment of the credit with proceeds derived from any transaction that would be prohibited by Sanctions or, to the knowledge of any Credit Party, would otherwise cause the Lender or any other party to this Agreement to be in breach of any Sanctions. A Credit Party will notify the Lender and Administrative Agent in writing not more than five (5) Business Days after becoming aware of any breach of this section.

SECTION 3.23 Joint Enterprise. Each Loan Party has requested that the Agents, the Issuing Banks and Lenders make this credit facility available to the Loan Parties on a combined basis, in order to finance the Loan Parties' business most efficiently and economically. The Loan Parties' business is a mutual and collective enterprise, and the successful operation of each Loan Party is dependent upon the successful performance of the integrated group. The Loan Parties believe that consolidation of their credit facility will enhance the borrowing power of each Loan Party and ease administration of the facility, all to their mutual advantage. The Loan Parties acknowledge that Agents', Issuing Banks' and Lenders' willingness to extend credit and to administer the Collateral on a combined basis hereunder is done solely as an accommodation to Loan Parties and at Loan Parties' request.

SECTION 3.24 Location of Material Inventory and Equipment. Schedule 3.24 to Amendment No. 2 sets forth as of the ClosingAmendment No. 2 Effective Date all locations where the aggregate value of Inventory and Equipment (other than mobile Equipment or Inventory in transit) owned by the Loan Parties at each such location exceeds \$1,000,000.

SECTION 3.25 Accuracy of Borrowing Base. At the time any Borrowing Base Certificate is delivered pursuant to this Agreement, each Account and each item of Inventory included in the calculation of the Borrowing Base satisfies all of the criteria stated herein to be an Eligible Account and an item of Eligible Inventory, respectively.

SECTION 3.26 Senior Notes; Material Indebtedness. The Obligations constitute "Senior Debt" or "Designated Senior Indebtedness" (or any other defined term having a similar purpose) within the meaning of the Senior Note Documents (and any Permitted Refinancings thereof permitted under Section 6.01 other than refinancings with additional Term Loans). The Commitments and the Loans and other extensions of credit under the Loan Documents constitute "Credit Facilities" (or any other defined term having a similar purpose) or liabilities payable under the documentation related to "Credit Facilities" (or any other defined term having a similar purpose), in each case, within the meaning of the Senior Note Documents (and any Permitted Refinancings thereof permitted under Section 6.01 other than refinancings with additional Term Loans). The consummation of each of (i) the Transactions, (ii) each incurrence of Indebtedness hereunder and (iii) the granting of the Liens provided for under the Security Documents to secure the Secured Obligations is permitted under, and, in each case, does not require any consent or approval under, the terms of (A) the Senior Note Documents (and any Permitted Refinancings thereof), the Term Loan Documents (and any Permitted Term Loan Facility Refinancings thereof) or any other Material Indebtedness or (B) any other material agreement or instrument binding upon any Company or any of its property except, in the case of this clause (B), as could not reasonably be expected to result in a Material Adverse Effect.

SECTION 3.27 Centre of Main Interests and Establishments. For the purposes of The Council of the European Union Regulation No. 1346/2000 on Insolvency Proceedings (the "**Regulation**") (or, after June 26, 2017, the European Insolvency Regulation), (i) the centre of main interest (~~as that term is used in Article 3(1) of the Regulation~~) of each U.K. Loan Party is situated in England and Wales, (ii) the centre of main interest of the Irish Guarantor is situated in Ireland or Germany, and it has no "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any jurisdiction other than Ireland or Germany, (iii) the centre of main interest of each Swiss Loan Party is situated in Switzerland, and in each case each has no "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any other jurisdiction, (iv) the centre of main interest of each German Loan Party is situated in Germany, (v) ~~intentionally omitted~~ the centre of main interest of each Dutch Guarantor is situated in the Netherlands, and in each case each has no "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any other jurisdiction, (vi) the centre of main interest of each French Guarantor is situated in France, and in each case each has no "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any other jurisdiction, (vii) the centre of main interest of each Belgian Guarantor is situated in Belgium, and in each case each has no "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any other jurisdiction, and ~~(viii)~~ other than as provided in paragraph (ii) above, no Loan Party (to the extent such Loan Party is subject to the Regulation or the European Insolvency Regulation) shall have a centre of main interest other than as situated in its jurisdiction of incorporation.

SECTION 3.28 Holding and Dormant Companies. Except as may arise under the Loan Documents, the Term Loan Documents ~~or~~, any Permitted Holdings Indebtedness ~~or~~, (in the case of Novelis Europe Holdings Limited) the ~~New~~ Senior Notes, any Permitted First Priority Refinancing Debt, any Permitted Second Priority Refinancing Debt, any Permitted Unsecured Refinancing Debt, the Permitted Short Term Indebtedness, or Indebtedness incurred pursuant to Section 6.01(l), neither Holdings nor Novelis Europe Holdings Limited, trades or has any liabilities or commitments (actual or contingent, present or future) other than liabilities attributable or incidental to acting as a holding company of shares in the Equity Interests of its Subsidiaries.

SECTION 3.29 Certain Subsidiaries. The Excluded Collateral Subsidiaries as of the ~~Closing~~Amendment No. 2 Effective Date are listed on Schedule 1.01(e) to Amendment No. 2.

The Excluded Subsidiaries as of the ~~Closing~~Amendment No. 2 Effective Date are listed on

Schedule 1.01(f) to Amendment No. 2. The Joint Venture Subsidiaries as of the

~~Closing~~Amendment No. 2 Effective Date are listed on Schedule 1.01(g). ~~There are no~~ to Amendment No. 2. The Unrestricted Subsidiaries as of the ~~Closing Date~~Amendment No. 2 Effective Date are listed on Schedule 1.01(h) to Amendment No. 2.

SECTION 3.30 Inventory Matters. No Inventory that is included in the Borrowing Base is subject to retention of title (including extended retention of title or broadened extension of title) except as has been disclosed to the Administrative Agent and reflected in the Borrowing Base Certificate. Each Borrowing Base Certificate accurately reports any retention of title (including extended retention of title or broadened extension of title) claims with respect to any inventory included in such Borrowing Base Certificate. No inventory of any Borrower or Borrowing Base Guarantor is subject to retention of title (including extended retention of title or broadened extension of title) on an oral basis.

SECTION 3.31 Beneficial Ownership Certification. As of the Second Amendment Effective Date, the information included in the Beneficial Ownership Certification, if applicable, is true and correct in all respects.

SECTION 3.32 No Fiscal Unity. No Company is a member of a fiscal unity for VAT, corporate income tax or any other tax purposes, except for a fiscal unity for VAT or corporate income tax purposes consisting solely of Loan Parties.

SECTION 3.33 EEA Financial Institutions. No Loan Party is an EEA Financial Institution.

ARTICLE IV

CONDITIONS TO CREDIT EXTENSIONS

SECTION 4.01 Conditions to Amendment and Restatement. The amendment and restatement of the Existing Credit Agreement pursuant to the Amendment Agreement, and the obligation of each Lender and, if applicable, each Issuing Bank to fund the initial Credit Extension requested to be made by it under this Agreement, shall be subject to the prior or concurrent satisfaction of each of the conditions precedent set forth in this Section 4.01.

(a) Loan Documents. The Administrative Agent shall have received executed counterparts of each of the following, properly executed by a Responsible Officer of each applicable signing Loan Party, each in form and substance reasonably satisfactory to the Administrative Agent and each of the Lenders:

- (i) this Agreement,
- (ii) the Amendment Agreement,
- (iii) a Borrowing Base Certificate, dated the Closing Date and certifying the Borrowing Base as of August 31, 2014,
- (iv) to the extent applicable, a Note executed by each applicable Borrower in favor of each Lender that has requested a Note prior to the Closing Date;
- (v) the Perfection Certificates; and

(vi) such amendments to, amendments and restatements of, or confirmations or reaffirmations of, or supplements to, existing Security Documents or other Loan Documents, such additional Security Document, Loan Documents or other filings or actions, in each case as the Administrative Agent or the Collateral Agent may require in connection with the Transactions.

(b) Corporate Documents. The Administrative Agent shall have received:

- (i) a certificate of the secretary, assistant secretary or managing director (where applicable) of each Loan Party dated the Closing Date, certifying (A) that attached thereto is a true and complete copy of each Organizational Document (or its equivalent including the constitutional documents) of such Loan Party certified (to the extent customary in the applicable jurisdiction) as of a recent date by the Secretary of State (or equivalent Governmental Authority) of the jurisdiction of its organization, (B) that attached thereto is a true and complete copy of resolutions duly adopted by the Board of Directors and/or shareholders, as applicable, of such Loan Party authorizing the execution, delivery and performance of the Loan Documents to which such person is a party and, in the case

of Borrowers, the borrowings hereunder, and that such resolutions, or any other document attached thereto, have not been modified, rescinded, amended or superseded and are in full force and effect, (C) as to the incumbency and specimen signature of each officer executing any Loan Document or any other document delivered in connection herewith on behalf of such Loan Party (together with a certificate of another officer as to the incumbency and specimen signature of the secretary, assistant secretary or managing director executing the certificate in this clause (i), and other customary evidence of incumbency) and (D) that the borrowing, guarantee, or granting of Liens with respect to the Loans or any of the other Secured Obligations would not cause any borrowing, guarantee, security or similar limit binding on any Loan Party to be exceeded;

(ii) a certificate as to the good standing (where applicable, or such other customary functionally equivalent certificates or abstracts) of each Loan Party (in so-called "long-form" if available) as of a recent date, from such Secretary of State (or other applicable Governmental Authority);

(iii) evidence that the records of the applicable Loan Parties at the United Kingdom Companies House and each other relevant registrar of companies (or equivalent Governmental Authority) in the respective jurisdictions of organization of the Loan Parties are accurate, complete and up to date and that the latest relevant accounts have been duly filed, where applicable;

(iv) if relevant, evidence that each Irish Guarantor has done all that is necessary to follow the procedures set out in Sub-Sections (2) and (11) of section 60 of the Companies Act 1963 of Ireland in order to enable it to enter into the Loan Documents;

(v) a copy of the constitutional documents of any Person incorporated in Ireland whose shares are subject to security under any Security Document, together with any resolutions of the shareholders of such Person adopting such changes to the constitutional documents of that Person to remove any restriction on any transfer of shares or partnership interests (or equivalent) in such Person pursuant to any enforcement of any such Security Document;

(vi) evidence that each of the Loan Parties are members of the same group of companies consisting of a holding company and its subsidiaries for the purposes of Section 155 of the Companies Act 1963 of Ireland and Section 35 of the Companies Act 1990 of Ireland;

(vii) up-to date certified copy of the constitutional documents (e.g., for a German GmbH: *Handelsregisterauszug, Gesellschaftsvertrag, Gesellschafterliste*) for each German Loan Party; and

(viii) such other documents as the Lenders, the ~~Initial~~ Issuing ~~Bank~~Banks or the Administrative Agent may reasonably request.

(c) Officer's Certificate. The Administrative Agent shall have received a certificate, dated the Closing Date and signed by a Responsible Officer of the ~~Parent~~Canadian Borrower, certifying (i) compliance with the conditions precedent set forth in this Section 4.01 and Section 4.02(b) and (c), (ii) that no Default has occurred and is continuing, and (iii) that each of the representations and warranties made by any Loan Party set forth in ARTICLE III hereof or in any other Loan Document were true and correct in all material respects on and as of the Closing Date, except to the extent such representations and warranties expressly related to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects as of such earlier date.

(d) Opinions of Counsel. The Administrative Agent shall have received, on behalf of itself, the other Agents, the Lenders and the Issuing Banks, (i) a favorable written opinion of Torys LLP, special counsel for the Loan Parties and (ii) a favorable written opinion of each local and foreign counsel of the Loan Parties listed on Schedule 4.01(g), in each case (A) dated the Closing Date, (B) addressed to the Agents, the Issuing Banks and the Lenders and (C) covering ~~the matters set forth in Exhibit N and such other~~such matters relating to the Loan Documents and the Transactions as the Administrative Agent shall reasonably request.

(e) Solvency Certificate. The Administrative Agent shall have received a solvency certificate in the form of Exhibit O (or in such other form as is satisfactory to the Administrative Agent to reflect applicable legal requirements), dated the Closing Date and signed by a senior Financial Officer of each Loan Party or the ~~Parent~~Canadian Borrower.

(f) Applicable Law. The Administrative Agent shall be satisfied that Holdings, the Borrowers and their Subsidiaries and the Transactions shall be in full compliance with all material Applicable Law, including Regulations T, U and X of the Board, and shall have received satisfactory evidence of such compliance reasonably requested by them.

(g) Consents. All approvals of Governmental Authorities and third parties necessary to consummate the Transactions shall be obtained and shall be in full force and effect.

(h) Litigation. There shall be no governmental or judicial action, actual or threatened, that has or would have, singly or in the aggregate, a reasonable likelihood of restraining, preventing or imposing burdensome conditions on the Transactions.

(i) Fees. The Arrangers and Administrative Agent shall have received all Fees and other amounts due and payable on or prior to the Closing Date, including, to the extent invoiced, reimbursement or payment of all reasonable out-of-pocket expenses (including the reasonable legal fees and expenses of Skadden, Arps, Slate, Meagher & Flom LLP, special counsel to the Agents, and the reasonable fees and expenses of

any local counsel, foreign counsel, appraisers, consultants and other advisors) required to be reimbursed or paid by any Loan Party hereunder or under any other Loan Document.

(j) Insurance. The Administrative Agent shall have received a copy of, or a certificate as to coverage under, the property and liability insurance policies required by Section 5.04 and the applicable provisions of the Security Documents, each of which shall be endorsed or otherwise amended to include a “standard” lender’s loss payable or mortgagee endorsement (as applicable) and shall name the Collateral Agent, on behalf of the Secured Parties, as additional insured, in form and substance reasonably satisfactory to the Administrative Agent.

(k) USA Patriot Act. The Lenders shall have received, sufficiently in advance of the Closing Date, all documentation and other information that may be required by the Lenders in order to enable compliance with applicable “know your customer” and anti-money laundering rules and regulations, including the Act (including, without limitation, the information described in Section 11.13).

(l) Minimum Excess Availability. Excess Availability (determined based upon the Borrowing Base as of August 31, 2014, and Revolving Commitments, Loans and L/C Exposure as of the Closing Date) shall be not less than \$200,000,000, all calculated on a pro forma basis to give effect to the Transactions (including the initial Borrowings and issuance of Letters of Credit and assumption of Existing Letters of Credit as of the Closing Date).

Notwithstanding the foregoing, to the extent that the execution and delivery of any document or the completion of any task or action is listed on Schedule 5.16, such item shall not be a condition precedent and shall instead be subject to Section 5.16.

SECTION 4.02 Conditions to All Credit Extensions. The obligation of each Lender and each Issuing Bank to make any Credit Extension (including the initial Credit Extension, except to the extent otherwise provided in the applicable Increase Joinder or Amendment No. 2) shall be subject to, and to the satisfaction of, each of the conditions precedent set forth below.

(a) Notice. The Administrative Agent shall have received a Borrowing Request as required by Section 2.03 (or such notice shall have been deemed given in accordance with Section 2.03) if Loans are being requested or, in the case of the issuance, amendment, extension or renewal of a Letter of Credit, the applicable Issuing Bank and the Administrative Agent shall have received an LC Request as required by Section 2.18 or, in the case of the Borrowing of a Swingline Loan, the Swingline Lender and the Administrative Agent shall have received a Borrowing Request as required by Section 2.17.

(b) No Default. No Default shall exist, or would result from such proposed Credit Extension or from the application of the proceeds therefrom.

(c) Representations and Warranties. Each of the representations and warranties made by any Loan Party set forth in ARTICLE III hereof or in any other Loan Document shall be true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, and in the case of the representations and warranties in Section 3.27 as they relate to the Borrowers and the Borrowing Base Guarantors, in all respects) on and as of the date of such Credit Extension with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation or warranty that is qualified as to materiality, “Material Adverse Effect” or similar language, in all respects) as of such earlier date.

(d) No Legal Bar. With respect to each Lender, no order, judgment or decree of any Governmental Authority shall purport to restrain such Lender from making any Loans to be made by it. No injunction or other restraining order shall have been issued, shall be pending or noticed with respect to any action, suit or proceeding seeking to enjoin or otherwise prevent the consummation of, or to recover any damages or obtain relief as a result of, the transactions contemplated by this Agreement or the making of Loans hereunder.

Each of the delivery of a Borrowing Request or an LC Request and the acceptance by any Borrower of the proceeds of such Credit Extension shall constitute a representation and warranty by each Borrower and each other Loan Party that on the date of such Credit Extension (both immediately before and after giving effect to such Credit Extension and the application of the proceeds thereof) the conditions contained in Section 4.02(b) through (d) have been satisfied (which representation and warranty shall be deemed limited to the knowledge of the Loan Parties in the case of the first sentence of Section 4.02(d)). Borrowers shall provide such information (including, if applicable, calculations in reasonable detail of the covenants in Section 6.10) as the Administrative Agent may reasonably request to confirm that the conditions in Section 4.02(b) through (d) have been satisfied.

ARTICLE V

AFFIRMATIVE COVENANTS

Each Loan Party warrants, covenants and agrees with each Lender that so long as this Agreement shall remain in effect and until Full Payment of the Obligations, unless the Required Lenders shall otherwise consent in writing, each Loan Party will, and will cause each of its Restricted Subsidiaries to:

SECTION 5.01 Financial Statements, Reports, etc. Furnish to the Administrative Agent (and the Administrative Agent shall make available to the Lenders, on the Platform or otherwise, in accordance with its customary procedures):

(a) Annual Reports. As soon as available and in any event within the earlier of (i) ninety (90) days and (ii) such shorter period as may be required by the Securities and Exchange Commission (including, if applicable, any extension permitted under Rule 12b-25 of the Exchange Act), after the end of each fiscal year (and in any case not less than one time in each calendar year), (i) the consolidated balance sheet of ~~Parent Borrower~~the Designated Company, as of the end of such fiscal year and related consolidated statements of income, cash flows and stockholders' equity for such fiscal year, in comparative form with such financial statements as of the end of, and for, the preceding fiscal year, and notes thereto, all prepared in accordance with Regulation S-X and accompanied by an opinion of independent public accountants of recognized national standing reasonably satisfactory to the Administrative Agent (which opinion shall not be qualified as to scope or contain any going concern qualification, paragraph of emphasis or explanatory statement), stating that such financial statements fairly present, in all material respects, the consolidated financial condition, results of operations and cash flows of ~~Parent Borrower~~the Designated Company as of the dates and for the periods specified in accordance with U.S. GAAP, (ii) a narrative report and management's discussion and analysis, in a form reasonably satisfactory to the Administrative Agent, of the financial condition and results of operations of ~~Parent Borrower~~the Designated Company for such fiscal year, as compared to amounts for the previous fiscal year (it being understood that the information required by clauses (i) and (ii) of this Section 5.01(a) may be furnished in the form of a Form 10-K (so long as the financial statements, narrative report and management's discussion therein comply with the requirements set forth above)), (iii) consolidating balance sheets, statements of income and cash flows of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries separating out the results by region and (iv) such other consolidating balance sheets, statements of income and cash flows of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries as may be required to be delivered pursuant to the Term Loan Credit Agreement (or any Term Loan Credit Agreement Refinancing Indebtedness);

(b) Quarterly Reports. As soon as available and in any event within the earlier of (i) forty-five (45) days and (ii) such shorter period as may be required by the Securities and Exchange Commission (including, if applicable, any extension permitted under Rule 12b-25 of the Exchange Act), after the end of each of the first three fiscal quarters of each fiscal year, (i) the consolidated balance sheet of ~~Parent Borrower~~the Designated Company as of the end of such fiscal quarter and related consolidated statements of income and cash flows for such fiscal quarter and for the then elapsed portion of the fiscal year, in comparative form with the consolidated statements of income and cash flows for the comparable periods in the previous fiscal year, and notes thereto, all prepared in accordance with Regulation S-X under the Securities Act and accompanied by a certificate of a Financial Officer stating that such financial statements fairly present, in all material respects, the consolidated financial condition, results of operations and cash flows of ~~Parent Borrower~~the Designated Company as of the date and for the periods specified in accordance with U.S. GAAP consistently applied, and on a basis consistent with audited financial statements referred to in clause (a) of this Section, except as otherwise disclosed therein and subject to the absence of footnote disclosures and to normal year-end audit adjustments, (ii) a narrative report and management's discussion and analysis, in a form reasonably satisfactory to the Administrative Agent, of the financial condition and results of operations for such fiscal quarter and the then elapsed portion of the fiscal year, as compared to the comparable periods in the previous fiscal year (it being understood that the information required by clauses (i) and (ii) of this Section 5.01(b) may be furnished in the form of a Form 10-Q (so long as the financial statements, management report and management's discussion therein comply with the requirements set forth above)), (iii) consolidating balance sheets, statements of income and cash flows of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries separating out the results by region and (iv) such other consolidating balance sheets, statements of income and cash flows of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries as may be required to be delivered pursuant to the Term Loan Credit Agreement (or any Term Loan Credit Agreement Refinancing Indebtedness);

(c) ~~[Reserved]~~ Beneficial Ownership. Upon request by the Administrative Agent, documents showing any change in the information provided in the Beneficial Ownership Certification that would result in a change to the list of beneficial owners identified in parts (c) or (d) of such certification.

(d) Financial Officer's Certificate. (i) Concurrently with any delivery of financial statements under Section 5.01(a) and (b), a Compliance Certificate (A) certifying that no Default has occurred or, if such a Default has occurred, specifying the nature and extent thereof and any corrective action taken or proposed to be taken with respect thereto, (B) setting forth computations in reasonable detail satisfactory to the Administrative Agent (including a breakdown of such computations on a quarterly basis) demonstrating compliance with the covenant contained in Section 6.10 (including a calculation of Consolidated Fixed Charge Coverage Ratio, whether or not a Covenant Trigger Event has occurred) and (C) showing a reconciliation of Consolidated EBITDA (Fixed Charge) to the net income set forth on the statement of income, such reconciliation to be on a quarterly basis; and (ii) to the extent any Unrestricted Subsidiaries are in existence during the period covered by such financial statements, consolidating balance sheets, statements of income and cash flows separating out the results of the ~~Parent Borrower~~Designated Company and its Restricted Subsidiaries, on the one hand, and the Unrestricted Subsidiaries, on the other;

(e) Officer's Certificate Regarding Organizational Chart and Perfection of Collateral. Concurrently with any delivery of financial statements under Section 5.01(a), a certificate of a Responsible Officer of the Administrative Borrower attaching an accurate organizational chart (or confirming that there has been no change in organizational structure) and otherwise setting forth the information required pursuant to the Perfection Certificate Supplement or confirming that there has been no change in such information since the date of the Perfection Certificate or latest Perfection Certificate Supplement;

(f) Public Reports. Promptly after the same become publicly available, copies of all periodic and other reports, proxy statements and other materials filed by any Loan Party with the Securities and Exchange Commission, or any Governmental Authority succeeding to any or all of the functions of said Commission, with any national U.S. or non-U.S. securities regulatory authority or securities exchange or with the National Association of Securities Dealers, Inc., or distributed to holders of its publicly held Indebtedness or securities pursuant to the terms of the documentation governing such Indebtedness or securities (or any trustee, agent or other representative therefor), as the case may be; provided that documents required to be delivered pursuant to this clause (f) may be delivered electronically and if so delivered, shall be deemed to have been delivered on the date (i) on which ~~Parent Borrower~~the Designated Company posts such documents, or provides a link thereto on

~~Parent-Borrower's~~ the Designated Company's website (or other location specified by the ~~Parent-Borrower~~ Designated Company) on the Internet; or (ii) on which such documents are posted on ~~Parent-Borrower's~~ the Designated Company's behalf on the Platform; provided that: (i) upon written request by the Administrative Agent, ~~Parent-Borrower~~ the Designated Company shall deliver paper copies of such documents to the Administrative Agent for further distribution to each Lender until a written request to cease delivering paper copies is given by the Administrative Agent and (ii) ~~Parent-Borrower~~ the Designated Company shall notify (which may be by facsimile or electronic mail) the Administrative Agent of the posting of any such documents and provide to the Administrative Agent by electronic mail electronic versions (i.e., soft copies) of such documents; provided, further, that notwithstanding anything contained herein, in every instance ~~Parent-Borrower~~ the Designated Company shall be required to provide paper copies or electronic copies through e-mail of the certificates required by clauses (d) and (e) of this Section 5.01 to the Administrative Agent;

(g) Management Letters. Promptly after the receipt thereof by any Company, a copy of any "management letter", exception report or other similar letter or report received by any such person from its certified public accountants and the management's responses thereto;

(h) Projections. Within sixty (60) days of the end of each fiscal year, a copy of the annual projections for ~~Parent-Borrower~~ the Designated Company (including balance sheets, statements of income and sources and uses of cash), for each quarter of the then current fiscal year prepared in detail on a consolidated basis, with appropriate presentation and discussion of the principal assumptions upon which such forecasts are based, accompanied by the statement of a Financial Officer of the ~~Parent-Borrower~~ Designated Company to the effect that such assumptions are believed to be reasonable;

(i) Labor Relations. Promptly after becoming aware of the same, written notice of (a) any labor dispute to which any Loan Party or any of its Restricted Subsidiaries is or is expected to become a party, including any strikes, lockouts or other labor disputes relating to any of such person's plants and other facilities, which could reasonably be expected to result in a Material Adverse Effect, (b) any Worker Adjustment and Retraining Notification Act or related liability incurred with respect to the closing of any plant or other facility of any such person and (c) any material liability under Applicable Law similar to the Worker Adjustment and Retraining Notification Act or otherwise arising out of plant closings;

(j) Global Pension Report. Promptly upon receipt thereof by any Loan Party, but in any event not less than annually, those sections related to Canadian Pension Plans set forth in a global pension report, in form reasonably satisfactory to the Administrative Agent; provided that this clause (j) shall not apply in any year in which a report is delivered pursuant to Section 5.06(f).

(k) Asset Sales. Contemporaneous with or prior to (i) an Asset Sale ~~not in the ordinary course of business~~ pursuant to Section 6.06(b) or (s), the Net Cash Proceeds of which (or the Dollar Equivalent thereof) are anticipated to exceed \$120,000,000 or (ii) an Asset Sale, the Net Cash Proceeds of which (or the Dollar Equivalent thereof) are anticipated to exceed \$25,000,000 with respect to any portion of such assets constituting Revolving Credit Priority Collateral, written notice (a) describing such Asset Sale or the nature and material terms and conditions of such transaction and (b) stating the estimated Net Cash Proceeds anticipated to be received by any Loan Party or any of its Restricted Subsidiaries;

(l) Norf GmbH. Promptly upon the execution thereof, a certified copy of any amendment or replacement of the joint venture agreement for Norf GmbH;

(m) Other Information. Promptly, from time to time, such other information regarding the operations, properties, business affairs and condition (financial or otherwise) of any Company, or compliance with the terms of any Loan Document, or matters regarding the Collateral (beyond the requirements contained in Section 9.03) as the Administrative Agent or any Lender (acting through the Administrative Agent) may reasonably request, including, but not limited to, all documentation and other information that may be required from time to time by the Lenders, the Issuing Banks or the Agents in order to enable compliance with applicable "know your customer" and anti-money laundering rules and regulations, including the Patriot Act and the information described in Section 11.13.

SECTION 5.02 Litigation and Other Notices. Furnish to the Administrative Agent written notice of the following promptly (and, in any event, within ten (10) Business Days after acquiring knowledge thereof) ~~or, in the case of an Event of Default under Section 8.01(a), on the Business Day that a Loan Party acquires knowledge thereof), and the Administrative Agent shall make such written notice available to the Lenders, on the Platform or otherwise, in accordance with its customary procedures:~~

(a) any Default or Event of Default, specifying the nature and extent thereof and the corrective action (if any) taken or proposed to be taken with respect thereto;

(b) the filing or commencement of, or any written notice of intention of any person to file or commence, any action, suit, litigation or proceeding, whether at law or in equity by or before any Governmental Authority, (i) against any Borrower or other Company that in the reasonable judgment of the Borrowers could reasonably be expected to result in a Material Adverse Effect if adversely determined or (ii) with respect to any Loan Document;

(c) any development that has resulted in, or could reasonably be expected to result in, a Material Adverse Effect;

(d) the occurrence of a Casualty Event involving a Dollar Equivalent amount in excess of ~~\$60,000,000~~ \$90,000,000 (or in excess of ~~\$25,000,000~~ \$37,500,000 of Inventory);

(e) any dispute or contest with regard to any Lien that could reasonably be expected to result in forfeiture of Revolving Credit Priority Collateral having a Dollar Equivalent fair market value in excess of \$~~1,500,000~~2,250,000;

(f) the incurrence of any Lien on Revolving Credit Priority Collateral arising out of or in connection with any Priority Payable for amounts past due and owing by a Borrower or Borrowing Base Guarantor, or for an accrued amount for which a Borrower or Borrowing Base Guarantor then has an obligation to remit to a Governmental Authority or other Person pursuant to a requirement of Applicable Law and having a Dollar Equivalent value in excess of \$~~1,500,000~~2,250,000; and

(g) (i) the incurrence of any Lien (other than Permitted Liens) on the Collateral or (ii) the occurrence of any other event which could reasonably be expected to be material with regard to (x) the Revolving Credit Priority Collateral, taken as a whole, or (y) the Pari Passu Priority Collateral, taken as a whole.

SECTION 5.03 Existence; Businesses and Properties.

(a) Do or cause to be done all things reasonably necessary to preserve, renew and keep in full force and effect its legal existence, rights and franchises necessary or desirable in the normal conduct of its business, except (i) other than with respect to a Borrower's ~~or~~, Borrowing Base Guarantor's or Receivables Seller's legal existence, to the extent the failure to do so would not reasonably be expected to have a Material Adverse Effect or (ii) pursuant to a transaction permitted by Section 6.05 or Section 6.06.

(b) Do or cause to be done all things reasonably necessary to obtain, maintain, preserve, renew, extend and keep in full force and effect the rights, licenses, permits, privileges, franchises, approvals, authorizations, and Intellectual Property used in or necessary to the conduct of its business, except where the failure to do so could not reasonably be expected to result in a Material Adverse Effect; do or cause to be done all things reasonably necessary to preserve its business and the goodwill and business of the customers, advertisers, suppliers and others having business relations with each Loan Party or any of its Restricted Subsidiaries, except where the failure to do so could not reasonably be expected to result in a Material Adverse Effect; comply with Applicable Law (including any and all zoning, building, Environmental Law, ordinance, code or approval or any building permits or any restrictions of record or agreements affecting the Real Property), contractual obligations, and decrees and orders of any Governmental Authority, whether now in effect or hereafter enacted, except where the failure to comply, individually or in the aggregate, could not reasonably be expected to result in a Material Adverse Effect; and at all times maintain, preserve and protect all of its property and keep such property in good repair, working order and condition (other than wear and tear occurring in the ordinary course of business) and from time to time make, or cause to be made, all needful and proper repairs, renewals, additions, improvements and replacements thereto reasonably necessary in order that the business carried on in connection therewith may be properly conducted at all times, except in each case where the failure to do so could not reasonably be expected to result in a Material Adverse Effect. Maintain in effect and enforce policies and procedures designed to ensure compliance

by each Borrower, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

SECTION 5.04 Insurance.

(a) Generally. Keep its insurable property adequately insured at all times by financially sound and reputable insurers; maintain such other insurance, to such extent and against such risks as is customary with companies in the same or similar businesses operating in the same or similar locations, including insurance with respect to Mortgaged Properties and other properties material to the business of the Companies against such casualties and contingencies and of such types and in such amounts with such deductibles as is customary in the case of similar businesses operating in the same or similar locations, including (i) physical hazard insurance on an "all risk" basis (subject to usual and customary exclusions), (ii) commercial general liability against claims for bodily injury, death or property damage covering any and all insurable claims, (iii) explosion insurance in respect of any boilers, machinery or similar apparatus constituting Collateral, (iv) business interruption insurance and, with respect to Mortgaged Properties located in ~~the United States or in any other~~any jurisdiction requiring such insurance, flood insurance (~~to the extent such flood insurance is required under clause (c) below~~), and (v) worker's compensation insurance and such other insurance as may be required by any requirement of Applicable Law; provided that with respect to physical hazard insurance, neither the Collateral Agent nor the applicable Company shall agree at any time after the occurrence of a Cash Dominion Trigger Event and prior to the subsequent occurrence of a Cash Dominion Recovery Event to the adjustment of any claim thereunder with regard to Inventory having a Dollar Equivalent value in excess of \$20,000,000 without the consent of the other (such consent not to be unreasonably withheld or delayed); provided, further, that no consent of any Company shall be required during an Event of Default.

(b) Requirements of Insurance. All such property and liability insurance maintained by the Loan Parties shall (i) provide that no cancellation, material reduction in amount or material change in coverage thereof shall be effective until at least thirty (30) days after receipt by the Collateral Agent of written notice thereof, (ii) name the Collateral Agent as mortgagee, additional insured or loss payee, as applicable (in the case of property insurance) or additional insured on behalf of the Secured Parties (in the case of liability insurance), and (iii) if reasonably requested by the Collateral Agent, include a breach of warranty clause.

(c) [Reserved].

(d) Broker's Report. As soon as practicable and in any event within ninety (90) days after the end of each fiscal year, deliver to the Administrative Agent and the Collateral Agent (i) a report of a reputable insurance broker with respect to the insurance maintained pursuant to clauses (i)-(iv) of Section 5.04(a) in form and substance reasonably satisfactory to the Administrative Agent and the Collateral Agent (together with such additional reports (provided such reports are readily ascertainable) as the Administrative Agent or the Collateral Agent may

reasonably request), and (ii) such broker's statement that all premiums then due and payable with respect to the coverage maintained pursuant to clauses (i)-(iv) of [Section](#)

[5.04\(a\)](#) have been paid and confirming, with respect to any property, physical hazard or liability insurance maintained by a Loan Party, that the Collateral Agent has been named as [mortgagee](#), loss payee or additional insured, as applicable.

(e) [Mortgaged Properties](#). Each Loan Party shall comply in all material respects with all Insurance Requirements in respect of each Mortgaged Property; provided, however, that each Loan Party may, at its own expense and after written notice to the Administrative Agent, (i) contest the applicability or enforceability of any such Insurance Requirements by appropriate legal proceedings, the prosecution of which does not constitute a basis for cancellation or revocation of any insurance coverage required under this [Section 5.04](#) or (ii) cause the Insurance Policy containing any such Insurance Requirement to be replaced by a new policy complying with the provisions of this [Section 5.04](#).

SECTION 5.05 [Taxes](#)

(a) [Payment of Taxes](#). Pay and discharge promptly when due all material Taxes and governmental charges or levies imposed upon it or upon its income or profits or in respect of its property, before the same shall become delinquent or in default, as well as all lawful claims for labor, services, materials and supplies or otherwise that, if unpaid, might give rise to a Lien other than a Permitted Lien upon such properties or any part thereof; provided that such payment and discharge shall not be required with respect to any such Tax, charge, levy or claim so long as (x) the validity or amount thereof shall be contested in good faith by appropriate proceedings timely instituted and diligently conducted and the applicable Company shall have set aside on its books adequate reserves or other appropriate provisions with respect thereto in accordance with U.S. GAAP (or other applicable accounting rules), and (y) such contest operates to suspend collection of the contested obligation, Tax or charge and enforcement of a Lien other than a Permitted Lien.

(b) [Filing of Tax Returns](#). Timely file all material Tax Returns required by Applicable Law to be filed by it.

SECTION 5.06 [Employee Benefits](#)

(a) Comply with the applicable provisions of ERISA and the Code and any Applicable Law applicable to any Foreign Plan or Compensation Plan, except where any noncompliance could not reasonably be expected to result in a Material Adverse Effect.

(b) Furnish to the Administrative Agent (x) as soon as possible after, and in any event within five (5) Business Days after any Responsible Officer of any Company or any ERISA Affiliates of any Company knows that, any ERISA Event has occurred, a statement of a Financial Officer of Administrative Borrower setting forth details as to such ERISA Event and the action, if any, that the Companies propose to take with respect thereto, and (y) upon request by the Administrative Agent, copies of such other documents or governmental reports or filings relating to any Plan (or Foreign Plan, or other employee benefit plan sponsored or contributed to by any Company) as the Administrative Agent shall reasonably request.

(c) (i) Ensure that the Novelis U.K. Pension Plan is funded in accordance with the agreed schedule of contributions dated May 16, 2007, and that no action or omission is taken by any Company in relation to such a pension scheme which has or is reasonably likely to have a Material Adverse Effect; (ii) except for any existing defined benefit pension schemes as specified on [Schedule 3.17 to Amendment No. 2](#) ensure that no Company is or has been at any time an employer (for the purposes of Sections 38 to 51 of the Pensions Act 2004) of an occupational pension scheme which is not a money purchase scheme (both terms as defined in the Pension Schemes Act 1993) or "connected" with or an "associate" of (as those terms are defined in Sections 39 or 43 of the Pensions Act 2004) such an employer; (iii) deliver to the Administrative Agent upon request as those reports are prepared in order to comply with the then current statutory or auditing requirements (as applicable either to the trustees of any relevant schemes), actuarial reports in relation to all pension schemes mentioned in clause (i) above; (iv) promptly notify the Administrative Agent of any material change in the agreed rate of contributions to any pension schemes mentioned in clause (i) above; (v) promptly notify the Administrative Agent of any investigation or proposed investigation by the Pensions Regulator which may lead to the issue of a Financial Support Direction or a Contribution Notice to any member of the Group; and (vi) promptly notify the Administrative Agent if it receives a Financial Support Direction or a Contribution Notice from the Pensions Regulator.

(d) Ensure that all Foreign Plans (except the Novelis U.K. Pension Plan) and Compensation Plans that are required to be funded are funded and contributed to in accordance with their terms to the extent of Applicable Law, except where any noncompliance could not reasonably be expected to result in a Material Adverse Effect.

(e) Administer the Canadian Pension Plans in accordance with the requirements of the applicable pension plan texts and funding agreements governing the Canadian Pension Plans, the Income Tax Act Canada) and applicable federal or provincial pension benefits legislation except for any non-compliance that would not reasonably be expected to have a Material Adverse Effect.

(f) Provide the Administrative Agent with copies of all actuarial reports and supplemental cost certificates prepared in connection with any Canadian Defined Benefit Plans and filed with a Governmental Authority promptly after filing at such times as are required by law, and up to once per year if requested by the Agent acting reasonably an actuarial certification based upon the form of certification required to be provided in connection with Section 19(4) and 19(5) of the regulations under the Pension Benefits Act (Ontario) as detailed in Policy T-800-402 of the Financial Services Commission of Ontario provided that: (i) the determination date of the certification shall be as at a month end, (ii) solvency liabilities used for certification purposes shall be based on the liabilities reflected in the most recently filed actuarial valuation extrapolated to the determination date reflecting discount rates and mortality based on the Canadian Institute of Actuaries Standard of Practice and Education Notes, (iii) assets used for certification purposes shall be as provided by the fund custodian as at the determination date not

reflecting contributions receivable, and (iv) if a certification has been prepared with a determination date that is within three months of the determination date of the certification requested by the Administrative Agent such prior certification shall be accepted by the Administrative Agent and no additional certification will be required that year for the Canadian Defined Benefit Plan to which the prior certification relates.

(g) Provide the Administrative Agent (i) any material direction, order, notice or ruling received from any Governmental Authority addressing grounds for the winding up or partial winding up of a Canadian Defined Benefit Plan promptly after receipt, (ii) immediate notice of the occurrence of any Canadian Pension Termination Event, (iii) any correspondence from any Governmental Authority related to the termination or wind up, in whole or in part, of a Canadian Defined Benefit Plan promptly after receipt, (iv) notice of a failure by a Borrower or Guarantor to make contributions to its Canadian Pension Plan as required by the applicable pension benefits standards legislation promptly after a Borrower or Guarantor has knowledge of such failure, and (v) any other documents already in the possession of the Borrowers or the Guarantors related to a Canadian Pension Plan as the Agent may reasonably request.

(h) Notify the Agent thirty (30) days prior to the effective date of an amendment to a Canadian Defined Benefit Plan that terminates the Canadian Defined Benefit Plan, that would reasonably be expected to result in a Wind Up Triggering Event, or that would reasonably be expected to have a Material Adverse Effect.

SECTION 5.07 Maintaining Records; Access to Properties and Inspections; Annual Meetings; Field Examinations and Appraisals.

(a) Keep proper books of record and account in which full, true and correct entries in conformity in all material respects with GAAP (or other applicable accounting standards) and Applicable Law of all financial transactions and the assets and business of each Company and its Restricted Subsidiaries are made of all dealings and transactions in relation to its business and activities, including, without limitation, proper records of intercompany transactions) with full, true and correct entries reflecting all payments received and paid (including, without limitation, funds received by or for the account of any Loan Party from deposit accounts of the other Companies). Each Company will permit any representatives designated by the Administrative Agent (who may be accompanied by any Agent or Lender) to visit and inspect the financial records and the property of such Company on no more than on two occasions per fiscal year so long as no Event of Default is continuing (at reasonable intervals, during normal business hours and within five Business Days after written notification of the same to Administrative Borrower, except that, during the continuance of an Event of Default, none of such restrictions shall be applicable) and to make extracts from and copies of such financial records, and permit any representatives designated by the Administrative Agent (who may be accompanied by any Agent or Lender) to discuss the affairs, finances, accounts and condition of any Company with the officers and employees thereof and advisors therefor (including independent accountants).

(b) [intentionally omitted.]

(c) The Loan Parties shall cooperate fully with the Collateral Agent and its agents during all Collateral field audits and Inventory Appraisals, which shall be at the expense of Borrowers and shall be conducted (x) annually, (y) after the occurrence of a Reporting Trigger Event, so long as such field audit or Inventory Appraisal has commenced or been scheduled, or the auditors and/or appraisers have been engaged, on or prior to the date that is the later of (i) 90 days after the occurrence of such Reporting Trigger Event and (ii) the date that a Reporting Recovery Event occurs, if requested by the Collateral Agent, semi-annually, or (z) following the occurrence and during the continuation of an Event of Default, more frequently at Collateral Agent's reasonable request.

SECTION 5.08 Use of Proceeds. Use the proceeds of the Loans only for the purposes set forth in [Section 3.12](#) and request the issuance of Letters of Credit only for the purposes set forth in the definition of Commercial Letter of Credit or Standby Letter of Credit, as the case may be; [provided that \(x\) no part of the proceeds of the Loans or any Letters of Credit will be used to purchase or carry any Margin Stock or to extend credit to others for the purpose of purchasing or carrying any such Margin Stock or for any purpose, in the case of this clause \(x\), that violates the provisions of Regulation T, Regulation U or Regulation X.](#)

SECTION 5.09 Compliance with Environmental Laws; Environmental Reports.

(a) Comply, and cause all lessees and other persons occupying Real Property owned, operated or leased by any Company to comply, in all respects with all Environmental Laws and Environmental Permits applicable to its operations and Real Property; obtain and renew all Environmental Permits applicable to its operations and Real Property; and conduct all Responses, including any emergency ~~response~~ [Response](#), required by, and in accordance with, Environmental Laws, in each case, to the extent that the failure to do so could reasonably be expected to have a Material Adverse Effect; [provided](#) that no Company shall be required to undertake any Response to the extent that its obligation to do so is being contested in good faith and by proper proceedings and appropriate reserves are being maintained with respect to such circumstances in accordance with U.S. GAAP or other applicable accounting standards.

(b) If a Default caused by reason of a breach of [Section 3.18](#) or [Section 5.09\(a\)](#) shall have occurred and be continuing for more than thirty (30) days without the Companies commencing activities reasonably likely to cure such Default in accordance with Environmental Laws, at the written request of the Administrative Agent or the Required Lenders through the Administrative Agent, provide to the Lenders as soon as reasonably practicable after such request, at the expense of Borrowers, an environmental assessment report regarding the matters which are the subject of such Default, including, where appropriate, soil and/or groundwater sampling, prepared by an environmental consulting firm and, in form and substance, reasonably acceptable to the Administrative Agent and indicating the presence or absence of Hazardous Materials and the estimated cost of any compliance or Response to address them.

SECTION 5.10 Indenture Permitted Debt. Reserve at all times a portion of the Indenture Permitted Debt equal to the Total Commitment then

outstanding for usage for Indebtedness pursuant to the Loan Documents.

SECTION 5.11 Additional Collateral; Additional Guarantors

(a) Subject to the terms of the Intercreditor Agreement and this Section 5.11, with respect to (1) any property acquired after the Closing Date by any Loan Party that is intended to be subject to the Lien created by any of the Security Documents but is not so subject, including in connection with any step of the Permitted Reorganization, any Permitted Reorganization Action, any Permitted Aleris Foreign Subsidiary Transfer, and any Person becoming a Specified Aleris Subsidiary, and (2) any property that was Excluded Property but, as of the end of the most recently ended fiscal quarter or in connection with any step of the Permitted Reorganization, any Permitted Reorganization Action, any Permitted Aleris Foreign Subsidiary Transfer, and any Person becoming a Specified Aleris Subsidiary, has ceased to be Excluded Property, promptly (and in any event (x) within thirty (30) days after the acquisition thereof; or after the date such property ceases to be Excluded Property; provided that the Administrative Agent may agree to an extension thereof in its sole discretion or (y) immediately in connection with the applicable step(s) of the Permitted Reorganization, the applicable Permitted Reorganization Action, the applicable Permitted Aleris Foreign Subsidiary Transfer, or any Person becoming a Specified Aleris Subsidiary.) (i) execute and deliver to the Administrative Agent and the Collateral Agent such amendments or supplements to the relevant Security Documents or such other documents as the Administrative Agent or the Collateral Agent shall deem necessary or advisable to grant to the Collateral Agent, for its benefit and for the benefit of the other Secured Parties, a First Priority Lien on such property subject to no Liens other than Permitted Liens, and (ii) take all actions necessary to cause such Lien to be duly perfected to the extent required by such Security Document in accordance with Applicable Law, including the filing of financing statements (or other applicable filings) in such jurisdictions as may be reasonably requested by the Administrative Agent; provided that the actions required by clauses (i) and (ii) above need not be taken if the costs of doing so are excessive in relation to the benefits afforded thereby, as determined by the Administrative Agent in its reasonable discretion. The Borrowers shall otherwise take such actions and execute and/or deliver to the Administrative Agent and the Collateral Agent such documents as the Administrative Agent or the Collateral Agent shall reasonably require to confirm the validity, perfection and priority of the Lien of the Security Documents against such after-acquired properties.

(b) With~~Subject to Section 2.20, with~~ respect to any ~~person~~Person that becomes a Restricted Subsidiary or a Specified Aleris Subsidiary after the Closing Date (other than (y) an Excluded Collateral Subsidiary and (z) a Securitization Entity), or any Restricted Subsidiary that was an Excluded Collateral Subsidiary but, as of the end of the most recently ended fiscal quarter, has ceased to be an Excluded Collateral Subsidiary or is required to become a Loan Party by operation of the provisions of Section 5.11(d), the definition of Permitted Reorganization, the definition of Permitted Reorganization Actions, or the definition of Permitted Aleris Foreign Subsidiary Transfer, promptly (and in any event (x) within thirty (30) days after such ~~person~~Person becomes a Restricted Subsidiary or ceases to be an Excluded Collateral Subsidiary or is required to become a Loan Party by operation of the provisions of Section 5.11(d), provided that the Administrative Agent may agree to an extension of such time period in its sole discretion or (y) immediately upon such Person becoming a Specified Aleris Subsidiary or in connection with the applicable step(s) of the Permitted Reorganization, the definition of Permitted Reorganization Actions, or the definition of Permitted Aleris Foreign Subsidiary Transfer)

(i) pledge and deliver to the Collateral Agent the certificates, if any, representing all of the Equity Interests of such Restricted Subsidiary or such Specified Aleris Subsidiary owned by a Loan Party, together with undated stock powers or other appropriate instruments of transfer executed and delivered in blank by a duly authorized officer of the holder(s) of such Equity Interests, and all intercompany notes owing from such Restricted Subsidiary or Specified Aleris Subsidiary to any Loan Party together with instruments of transfer executed and delivered in blank by a duly authorized officer of such Loan Party and (ii) cause any such Restricted Subsidiary (other than a Specified Aleris Subsidiary) that is a Wholly Owned Subsidiary (other than ~~(A)~~(x) any Restricted Subsidiary prohibited from being a Guarantor under any requirement of Applicable Law relating to financial assistance, maintenance of capital and/or other corporate benefit restrictions and ~~(B)~~(y) any Restricted Subsidiaries where providing such guarantee would result in (1) materially adverse tax consequences, as determined by the Administrative Agent in its reasonable discretion (after consultation with its counsel) or (2) costs that are excessive in relation to the benefits afforded thereby, as determined by the Administrative Agent in its reasonable discretion), and any such Specified Aleris Subsidiary, in each case to the extent not prohibited by Applicable Law, (A) to execute a Joinder Agreement or such comparable documentation to become a Subsidiary Guarantor (or, in the case of a Subsidiary organized under the laws of the United States or any state thereof or the District of Columbia, a U.S. Borrower) and joinder agreements to the applicable Security Documents (in each case, substantially in the form annexed thereto or in such other form as may be reasonably satisfactory to the Administrative Agent) or, in the case of a Foreign Subsidiary, execute such other Security Documents (or joinder agreements) to the extent possible under and compatible with the laws of such Foreign Subsidiary's jurisdiction in form and substance reasonably satisfactory to the Administrative Agent, and (B) to take all actions necessary or advisable in the opinion of the Administrative Agent or the Collateral Agent to cause the ~~Lien~~Liens created by the applicable Security ~~Document~~Documents to be duly perfected to the extent required by such agreement in accordance with all Applicable Law, including the filing of financing statements (or other applicable filings) in such jurisdictions as may be reasonably requested by the Administrative Agent or the Collateral Agent. Notwithstanding the foregoing, (1) clause (i) of this paragraph (b) shall not apply to the Equity Interests of (w) any Company listed on Schedule 5.11(b) to Amendment No. 2 to the extent any requirement of

Applicable Law continues to prohibit the pledging of its Equity Interests to secure the Secured Obligations and any Company acquired or created after the Closing Date to the extent any requirement of Applicable Law prohibits the pledging of its Equity Interests to secure the Secured Obligations, (x) any non-Wholly Owned Subsidiary to the extent that the pledge or perfection of a Lien on such Equity Interests would violate any anti-assignment or negative pledge provisions of any contract to which such non-Wholly Owned Subsidiary is a party or the organizational documents or shareholders' agreement of such non-Wholly Owned Subsidiary (but only to the extent such anti-assignment or negative pledge clause is enforceable under Applicable Law), (y) any Joint Venture Subsidiary, to the extent the terms of any contract to which

such Joint Venture Subsidiary is a party or any applicable joint venture, stockholders', partnership, limited liability company or similar agreement (other than any of the foregoing entered into with any Company or any Affiliate of any Company) prohibits or conditions the pledging of its Equity Interests to secure the Secured Obligations and (z) any Restricted Subsidiary (~~other than a Specified Aleris Subsidiary~~) to the extent such pledge would result in materially adverse tax consequences, as determined by the Administrative Agent in its reasonable discretion (after consultation with its counsel) and (2) clause (ii) of this paragraph (b) shall not apply to any Company listed on Schedule 5.11(b) to Amendment No. 2 to the extent any requirement of Applicable Law prohibits it from becoming a Loan Party. Notwithstanding anything to the contrary in this Section 5.11(b), with respect to each Foreign Subsidiary that becomes a party to this Agreement after the Amendment No. 2 Effective Date, the obligations of such Foreign Subsidiary under this Agreement, any Guarantee, any Foreign Guarantee, any Security Document, any Joinder Agreement, or any other Loan Document, may be limited (and such agreements may be amended, restated, supplemented or otherwise modified to give effect to such limitations without the consent of any Person other than the Administrative Agent, the Collateral Agent, and such Foreign Subsidiary) in accordance with the Agreed Guarantee and Security Principles on terms reasonably satisfactory to the Administrative Agent and the Designated Company. As of the Amendment No. 2 Effective Date, each Lender party to Amendment No. 2, which Lenders constitute the Required Lenders, and each Lender that becomes a party to this Agreement after the Amendment No. 2 Effective Date, expressly consents to the terms set forth in, and the rights of the Agents to consent to the terms of the amendments, restatements, supplements and modifications described in, the immediately preceding sentence.

(c) Subject to the terms of the Intercreditor Agreement, promptly grant to the Collateral Agent, within sixty (60) days of the acquisition thereof, ~~or~~ (or such later date agreed by the Administrative Agent) (or immediately in connection with the applicable step(s) of the Permitted Reorganization, any Permitted Reorganization Action, or any Permitted Aleris Foreign Subsidiary Transfer), a security interest in and Mortgage on each Real Property located outside of the United States owned in fee by such Loan Party as is acquired by such Loan Party after the Closing Date and that, together with any improvements thereon, individually has a fair market value the Dollar Equivalent of which is at least \$15,000,000 (unless the subject property is already mortgaged to a third party to the extent permitted by Section 6.02 hereof or the costs of doing so are excessive in relation to the benefits afforded thereby, as determined by the Administrative Agent in its reasonable discretion), as additional security for the Secured Obligations. Subject to the terms of the Intercreditor Agreement, such Mortgages shall be granted pursuant to documentation reasonably satisfactory in form and substance to the Administrative Agent and the Collateral Agent and shall constitute valid, perfected and enforceable First Priority Liens subject only to Permitted Liens. Subject to the terms of the Intercreditor Agreement, the Mortgages or instruments related thereto shall be duly recorded or filed in such manner and in such places as are required by law to establish, perfect, preserve and protect the First Priority Liens in favor of the Collateral Agent required to be granted pursuant to the Mortgages and all taxes, fees and other charges payable in connection therewith shall be paid in full. Such Loan Party shall otherwise take such actions and execute and/or deliver to the Collateral Agent such documents as the Administrative Agent or the Collateral Agent shall reasonably require to confirm the validity, perfection and priority of the Lien of any existing Mortgage or new Mortgage against such after-acquired Real Property located outside of the United States (including a Title Policy (or title opinion reasonably satisfactory to the Collateral Agent), a Survey (if applicable in the respective jurisdiction), and a local counsel opinion (in form and substance reasonably satisfactory to the Administrative Agent and the Collateral Agent) in respect of such Mortgage). For purposes of this Section 5.11(c) Real Property located outside of the United States owned by a Company that becomes a Loan Party following the Closing Date in accordance with the terms of this Agreement shall be deemed to have been acquired on the later of (x) the date of acquisition of such Real Property located outside of the United States and (y) the date such Company becomes a Loan Party.

(d) If, at any time and from time to time after the Closing Date, Restricted Subsidiaries that are not Loan Parties because they are Excluded Collateral Subsidiaries comprise in the aggregate more than 7.5% of the Consolidated Total Assets of ~~Parent Borrower~~the Designated Company and its Subsidiaries as of the end of the most recently ended fiscal quarter or more than 7.5% of Consolidated EBITDA of ~~Parent Borrower~~the Designated Company and its Restricted Subsidiaries as of the end of the most recently ended fiscal quarter, then the Loan Parties shall, not later than 45 days after the date by which financial statements for such fiscal quarter are required to be delivered pursuant to this Agreement (or immediately in connection with the applicable step(s) of the Permitted Reorganization, any Permitted Reorganization Action, or any Permitted Aleris Foreign Subsidiary Transfer), cause one or more of such Restricted Subsidiaries to become Loan Parties (notwithstanding that such Restricted Subsidiaries are, individually, Excluded Collateral Subsidiaries) such that the foregoing condition ceases to be true. The Administrative Borrower may designate a Subsidiary Guarantor that was not a Restricted Subsidiary of the ~~Parent Borrower~~Designated Company on the Closing Date as an Excluded Collateral Subsidiary subject to the terms of the definition thereof, in which event the Guarantee by such Restricted Subsidiary shall be released in accordance with Section 7.09 and the Collateral Agent shall release the Collateral pledged by such Person.

(e) Any Foreign Subsidiary that is a Loan Party that has in the United States at any time (i) a deposit account that is part of the Cash Management System or the Cash Pooling Arrangements or (ii) property (other than Excluded Property) having an aggregate fair market value in excess of \$5,000,000 for any such foreign Loan Party, shall execute a joinder agreement to the U.S. Security Agreement reasonably satisfactory to the Administrative Agent.

(f) Notwithstanding any other provision of this Section 5.11 or any provision in any other Loan Document to the contrary, in no event shall this Section 5.11 or such Loan Document obligate any Loan Party to (i) grant a Lien to the Collateral Agent on any Excluded Property or (ii) take any perfection steps with respect to any Excluded Property.

(g) Notwithstanding any other provision of this Section 5.11 or any provision in any other Loan Document (other than the definitions of Eligible Accounts, Eligible Inventory, Reserves or any other provisions related to Excess Availability or the eligibility of any assets to be included in any Borrowing Base) to the contrary, in no event shall this Section 5.11 or such Loan Document obligate any Loan Party to (i) to the extent creation of a security interest in a specific asset requires that such asset be described with specificity in the applicable Security Document or filing (including, for example, a list of specific items of Inventory with identification numbers, or descriptions of commercial tort

claims), the creation of the Collateral Agent's security interest in such assets, to the extent acquired in a Permitted Acquisition, and (ii) the perfection of the Collateral Agent's security interest in assets acquired in a Permitted Acquisition, in the case of clauses (i) and (ii) shall not be required until the date that is 60 days after the closing date for such Permitted Acquisition (or such later date agreed by the Administrative Agent); provided that (A) the perfection of a security interest in Collateral with respect to which a Lien may be perfected by (x) the filing of financing statements under the UCC or equivalent filing system in a non-U.S. jurisdiction, or (y) filing short form security agreements or other filings with the applicable Intellectual Property filing office in the applicable jurisdiction, in the case of clauses (x) and (y), shall be required to occur substantially concurrently with any acquired entity becoming a Loan Party and (B) subject to the Intercreditor Agreement, each Loan Party shall use its commercially reasonable efforts to deliver to the Collateral Agent (or, to the extent required under the Intercreditor Agreement, the Term Loan Collateral Agent) stock certificates (together with stock powers or equivalent instruments of transfer) representing certificated Equity Interests required to be pledged under this Agreement and the Security Documents (without regard to this clause (g)) as soon as practicable upon the closing of such Permitted Acquisition, and in any case no later than the date that is 60 days after the closing date for such Permitted Acquisition (or such later date agreed by the Administrative Agent); provided that, except as otherwise provided in Amendment No. 2, this clause (g) shall not apply to the assets of, or Equity Interests issued by, any Specified Aleris Subsidiary.

(h) Notwithstanding any other provision of this Section 5.11 or any provision in any other Loan Document to the contrary, without the consent of any other person, the Administrative Agent and/or Collateral Agent may (or shall, to the extent required by any Loan Document) enter into any amendment or waiver of any Security Document (subject to the consent of the Loan Parties party thereto except as otherwise provided in such Security Document) or enter into any new agreement or instrument, to give effect to the provisions set forth in Section 5.11(f) and (g).

(i) Notwithstanding anything to the contrary contained herein or in any other Loan Document, the Administrative Agent shall not accept delivery of any joinder to any Loan Document with respect to any Subsidiary of any Loan Party that is not a Loan Party, if such Subsidiary qualifies as a "legal entity customer" under the Beneficial Ownership Regulation, unless such Subsidiary has delivered a Beneficial Ownership Certification in relation to such Subsidiary and the Administrative Agent has completed its Patriot Act searches, OFAC/PEP searches and customary individual background checks for such Subsidiary, the results of which shall be satisfactory to the Administrative Agent.

SECTION 5.12 Security Interests; Further Assurances. Subject to the terms of the

Intercreditor Agreement, promptly, upon the reasonable request of the Administrative Agent or the Collateral Agent, at Borrowers' expense, execute, acknowledge and deliver, or cause the execution, acknowledgment and delivery of, and thereafter register, file or record, or cause to be registered, filed or recorded, in an appropriate governmental office, any document or instrument supplemental to or confirmatory of the Security Documents or otherwise deemed by the Administrative Agent or the Collateral Agent reasonably necessary for the continued validity, perfection and priority of the Liens on the Collateral covered thereby subject to no other Liens except Permitted Liens, or use commercially reasonable efforts to obtain any consents or waivers as may be reasonably required in connection therewith. Deliver or cause to be delivered (using commercially reasonable efforts with respect to delivery of items from Persons who are not in the control of any Loan Party) to the Administrative Agent and the Collateral Agent from time to

time such other documentation, consents, authorizations, approvals and orders in form and substance reasonably satisfactory to the Administrative Agent and the Collateral Agent as the Administrative Agent and the Collateral Agent shall reasonably deem necessary to perfect or maintain the Liens on the Collateral pursuant to the Security Documents. Upon the exercise by the Administrative Agent, the Collateral Agent or any Lender of any power, right, privilege or remedy pursuant to any Loan Document that requires any consent, approval, registration, qualification or authorization of any Governmental Authority, execute and deliver all applications, certifications, instruments and other documents and papers that the Administrative Agent, the Collateral Agent or such Lender may reasonably require in connection therewith. If the Administrative Agent, the Collateral Agent or the Required Lenders determine that they are required by a requirement of Applicable Law to have appraisals prepared in respect of the Real Property of any Loan Party constituting Collateral (it being understood that Real Property located in the United States shall not constitute, or be required to become, Collateral), Borrowers shall provide to the Administrative Agent appraisals that satisfy the applicable requirements of the Real Estate Appraisal Reform Amendments of FIRREA (or other applicable requirements) and are otherwise in form reasonably satisfactory to the Administrative Agent and the Collateral Agent.

SECTION 5.13 Information Regarding Collateral. Not effect any change (i) in any

Loan Party's legal name or in any trade name used to identify it in the conduct of its business or in the ownership of its properties, (ii) in the location of any Loan Party's chief executive office, its principal place of business, any office in which it maintains books or records relating to Revolving Credit Priority Collateral or any other material Collateral owned by it or any office or facility at which such Collateral owned by it is located (including the establishment of any such new office or facility) other than changes in location to a property identified on Schedule 3.24 to Amendment No. 2, another property location previously identified on a Perfection Certificate Supplement or Borrowing Base Certificate or otherwise by notice to the Administrative Agent, as to which the steps required by clause (B) below have been completed or to a Mortgaged Property or a leased property subject to a Landlord Access Agreement (it being agreed that this clause (ii) shall not apply to the location of Inventory of any Loan Party that is not a Borrower or a Borrowing Base Guarantor, Inventory in transit from a supplier or vendor to a permitted location or between permitted locations or Inventory in transit to a customer, nor shall it prohibit ~~the~~ any Borrower or Borrowing Base Guarantor from maintaining Inventory having Dollar Equivalent fair market value not in excess of \$15,000,000 located at locations not identified on Schedule 3.24 to Amendment No. 2 or a Perfection Certificate Supplement or a Borrowing Base Certificate), (iii) in any Loan Party's identity or organizational structure, (iv) in any Loan Party's Federal Taxpayer Identification Number or organizational identification number, if any, or (v) in any Loan Party's jurisdiction of organization (in each case, including by merging with or into

any other entity, reorganizing, dissolving, liquidating, reorganizing or organizing in any other jurisdiction), until (A) it shall have given the Collateral Agent and the Administrative Agent not less than ten (10) Business Days' prior written notice (in the form of an Officer's Certificate) of its intention to do so, or such lesser notice period agreed to by the Administrative Agent, clearly describing such change and providing such other information in connection therewith as the Collateral Agent or the Administrative Agent may reasonably request and (B) it shall have taken all action reasonably satisfactory to the Administrative Agent to maintain the perfection and priority of the security interest of the Collateral Agent for the benefit of the Secured Parties in the Collateral, if applicable. Each Loan Party agrees to promptly provide the Administrative Agent, upon request therefor, with certified Organizational Documents reflecting any of the changes described in the preceding sentence. The Borrowers and Borrowing Base Guarantors shall not permit more than \$15,000,000 in the aggregate of their Inventory to be located at any location not listed on Schedule 3.24 to Amendment No. 2 (other than Inventory in transit), as updated from time to time in any Perfection Certificate Supplement or Borrowing Base Certificate. For the purposes of the Regulation and the European Insolvency Regulation, (i) no U.K. Loan Party shall change its centre of main interest (as that term is used in Article 3(1) of the Regulation) from England and Wales, (ii) nor shall Irish Guarantor change its centre of main interest from Ireland or Germany, nor shall Irish Guarantor have an "establishment" (as that term is used in Article 2(h) of the Regulation or Article 2(10) of the European Insolvency Regulation, as applicable) in any jurisdiction other than Ireland or Germany, (iii) nor shall any Swiss Loan Party change its centre of main interest from Switzerland, nor shall any Swiss Loan Party have an "establishment" in any other jurisdiction, (iv) nor shall any German Loan Party change its centre of main interest from Germany, (v) ~~intentionally omitted~~ nor shall any Dutch Guarantor change its centre of main interest from the Netherlands, nor shall any Dutch Guarantor have an "establishment" in any other jurisdiction, and (vi) nor shall any French Guarantor change its centre of main interest from France, nor shall any French Guarantor have an "establishment" in any other jurisdiction; ~~(vii) nor shall any Belgian Guarantor change its centre of main interest from Belgium, nor shall any Belgian Guarantor have an "establishment" in any other jurisdiction, and (viii) other than as provided in paragraph (ii) above, no Guarantor (to the extent such Guarantor is subject to the Regulation) shall have a centre of main interest other than as situated in its jurisdiction of incorporation.~~

SECTION 5.14 Affirmative Covenants with Respect to Leases. With respect to each

Lease to which a Loan Party is party as landlord or lessor, the respective Loan Party shall perform all the obligations imposed upon the landlord under such Lease and enforce all of the tenant's obligations thereunder, except where the failure to so perform or enforce could not reasonably be expected to result in a Property Material Adverse Effect.

SECTION 5.15 Ten Non-Bank Regulations and Twenty Non-Bank Regulations.

(a) Each Swiss Borrower shall ensure that while it is a Borrower:

(i) the aggregate number of Lenders of all Swiss ~~Borrower~~ Borrowers under this Agreement which are not Swiss Qualifying Banks must not exceed ten (10), (as per Ten Non-Bank Regulations); and

(ii) the aggregate number of creditors (including the Lenders), other than Swiss Qualifying Banks, where applicable, of the Swiss Borrower under all outstanding loans, facilities and/or private placements (including under this Agreement) must not at any time exceed twenty (20) (as per Twenty Non-Bank Regulations), in each case where failure to do so would have, or would reasonably be expected to have, a Material Adverse Effect.

(b) each Swiss Borrower will for the purposes of determining the total number of creditors which are Swiss Non-Qualifying Banks for the purposes of the 20 Non-Bank Creditor Rule ensure that at all times at least 10 Lenders that are Swiss Non-Qualifying Banks are permitted as Lenders (the "**Permitted Swiss Non-Qualifying Banks**") (irrespective of whether or not there are, at any time, any such Permitted Swiss Non-Qualifying Bank).

SECTION 5.16 Post-Closing Covenants; Covenants in Respect of Hedging Agreements Following the Aleris Acquisition Closing Date.

(a) Execute and deliver the documents and complete the tasks and take the other actions set forth on Schedule 5.16 of Amendment No. +2, in each case within the time limits specified on such Schedule.

(b) Promptly following the Aleris Acquisition Closing Date, use reasonable efforts to novate all transactions under the Specified Aleris Hedging Agreements, such that, after giving effect to such novation, such transactions shall be subject solely to the terms and conditions of Hedging Agreements (other than Specified Aleris Hedging Agreements) with one or more Companies, the terms of which shall not require a Lien on any assets of any Company to secure the obligations thereunder (other than solely as a result of the designation of any counterparty thereto as a "Secured Hedge Provider" in accordance with the terms of the Term Loan Credit Agreement).

(c) No later than the date that is 30 days after the Aleris Acquisition Closing Date, cease entering into any transactions under the Specified Aleris Hedging Agreements.

(d) No later than the date that is 180 days after the Aleris Acquisition Closing Date, cause all Specified Aleris Hedging Agreements to be terminated, and all transactions thereunder to be terminated, novated or cancelled.

(e) Promptly upon the termination, novation or cancellation of each transaction under any Specified Aleris Hedging Agreement, (i) cause all Liens on assets of Aleris or any of its Subsidiaries securing the obligations thereunder to be released (other than Liens arising solely as a result of the designation of any counterparty thereto as a "Secured Hedge Provider" in accordance with the terms of the Term Loan Credit Agreement), (ii) deliver to the Administrative Agent all documents and filings required or reasonably requested by any Agent to evidence the release of such Liens, and (iii) cause any collateral held by or on behalf of the counterparty to such transaction to promptly be returned to the applicable Company and be pledged to secure the Secured Obligations to the extent required under the Loan Documents on terms reasonably

satisfactory to the Administrative Agent and the Collateral Agent (except, in the case of this clause (iii), to the extent that such collateral is cash that is otherwise applied to settle or net out amounts owing under such Hedging Agreement at the time of such termination, novation or cancellation) (the requirements under this clause (e), collectively, the “Aleris Hedging Collateral Requirements”).

(f) No later than the date that is 10 Business Days after the commencement of the Specified Brazilian Expansion, the Designated Company shall deliver to the Administrative Agent written notice of the date that such expansion commenced.

SECTION 5.17 Designation of Subsidiaries. The ~~Parent Borrower~~Designated Company may at any time after the Closing Date designate any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company as an Unrestricted Subsidiary or any Unrestricted Subsidiary as a

Restricted Subsidiary; provided that (i) immediately before and after such designation, no Default shall have occurred and be continuing, (ii) immediately after giving effect to such designation, the Consolidated Fixed Charge Coverage Ratio shall, on a Pro Forma Basis, be at least 1.25 to 1.0 (it being understood that, as a condition precedent to the effectiveness of any such designation, the ~~Parent Borrower~~Designated Company shall deliver to the Administrative Agent a certificate of a Responsible Officer setting forth in reasonable detail the calculations demonstrating such compliance), (iii) no Subsidiary may be designated as an Unrestricted Subsidiary or continue as an Unrestricted Subsidiary if it is a “Restricted Subsidiary” for the purpose of any of the Senior Notes, the Term Loan Credit Agreement, any Additional Senior Secured Indebtedness, any Junior Secured Indebtedness, any Other Secured Indebtedness or any other Indebtedness, as applicable, constituting Material Indebtedness, (iv) no Restricted Subsidiary may be designated an Unrestricted Subsidiary if it was previously designated an Unrestricted Subsidiary, (v) if a Restricted Subsidiary is being designated as an Unrestricted Subsidiary hereunder, the sum of (A) the fair market value of assets of such Subsidiary as of such date of designation (the “**Designation Date**”), plus (B) the aggregate fair market value of assets of all Unrestricted Subsidiaries designated as Unrestricted Subsidiaries pursuant to this

Section 5.17 prior to the Designation Date (in each case measured as of the date of each such

Unrestricted Subsidiary’s designation as an Unrestricted Subsidiary) shall not exceed

\$500,000,000 in the aggregate as of such Designation Date pro forma for such designation, and (vi) no Restricted Subsidiary shall be a Subsidiary of an Unrestricted Subsidiary. The designation of any Subsidiary as an Unrestricted Subsidiary after the Closing Date shall constitute an

Investment by the ~~Parent Borrower~~Designated Company or its applicable Restricted

Subsidiary therein at the date of designation in an amount equal to the fair market value of the ~~Parent Borrower’s~~Designated Company’s or such Restricted Subsidiary’s (as applicable) investment therein. The designation of any Unrestricted Subsidiary as a Restricted Subsidiary shall

constitute (i) the incurrence at the time of designation of any Investment, Indebtedness or Liens of such Subsidiary existing at such time and (ii) a return on any Investment by the ~~Parent Borrower~~Designated Company or any of its Restricted Subsidiaries in Unrestricted Subsidiaries pursuant to the preceding sentence in an amount equal to the lesser of (x) the fair market value at the date of such designation of the ~~Parent Borrower’s~~Designated Company’s or its Restricted Subsidiary’s (as applicable) Investment in such Subsidiary and (y) the amount of Investments made by the ~~Parent Borrower~~Designated Company or its Restricted Subsidiaries in such Unrestricted Subsidiary from and after the date of such Subsidiary was designated as an

Unrestricted Subsidiary. Notwithstanding the foregoing, in no case shall any ~~of the Parent Borrower, any U.S. Borrower, the U.K. Borrower, the Swiss Borrower, the German Borrower,~~ or any Receivables Seller be an Unrestricted Subsidiary.

ARTICLE VI

NEGATIVE COVENANTS

Each Loan Party warrants, covenants and agrees with each Lender that, so long as this Agreement shall remain in effect and until Full Payment of the Obligations, unless the Required Lenders (and such other Lenders whose consent may be required under Section 11.02) shall otherwise consent in writing, no Loan Party will, nor will they cause or permit any Restricted Subsidiaries to:

SECTION 6.01 Indebtedness. Incur, create, assume or permit to exist, directly or indirectly, any Indebtedness, except:

(a) Indebtedness incurred under this Agreement and the other Loan Documents (including obligations under Bank Product Agreements with Secured Bank Product Providers, but excluding Excluded Bank Product Debt and obligations in respect of Excluded Bank Products);

(b) (i) Indebtedness outstanding on the Amendment No. +2 Effective Date and listed on Schedule 6.01(b) to Amendment No. +2, and Permitted Refinancings thereof, (ii) the Term Loans and all other Indebtedness of Loan Parties under the Term Loan Documents and Permitted Term Loan Facility Refinancings thereof and (iii) Term Loan Incremental Equivalent Indebtedness and Permitted Refinancings thereof;

(c) Indebtedness of any Company under Hedging Agreements (including Contingent Obligations of any Company with respect to Hedging Agreements of any other Company); provided that if such Hedging Obligations relate to interest rates, (i) such Hedging Agreements relate to payment obligations on Indebtedness otherwise permitted to be incurred by the Loan Documents and (ii) the notional principal amount of such Hedging Agreements at the time incurred does not exceed the principal amount of the Indebtedness to which such Hedging Agreements relate;

(d) Indebtedness of a Restricted Subsidiary owed in respect of Investments made in such Restricted Subsidiary pursuant to Section 6.04(r), and any other Indebtedness of a Restricted Subsidiary permitted by Section 6.04, and any Indebtedness of Holdings and Novelis Europe Holdings Limited permitted by Section 6.15;

(e) Indebtedness of any Securitization Entity under any Qualified Securitization Transaction (i) that is without recourse to any Company (other than such Securitization Entity) or any of their respective assets (other than pursuant to Standard Securitization Undertakings) and (ii) that are negotiated in good faith at arm's length; provided that no Default shall be outstanding, on a Pro Forma Basis, after giving effect thereto, and (A) such transaction is a Permitted German Alternative Financing, (B) such transaction is a Permitted Customer Account Financing, (C) solely to the extent that the Swiss Merger has not occurred, such transaction is a Permitted Novelis Switzerland Financing, (D) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Principal Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Principal Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a Non-Principal Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Principal Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000 or (E) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Loan Party Jurisdiction under all Qualified Securitization Transactions under this Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Loan Party Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a Non-Loan Party Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Principal Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000;

(f) Indebtedness in respect of Purchase Money Obligations and Capital Lease Obligations, and Permitted Refinancings thereof (other than refinancings funded with intercompany advances); provided that at the time such obligations are incurred, the outstanding amount of Indebtedness incurred under this clause (f) shall not exceed the greater of 7.5% of Consolidated Net Tangible Assets and ~~\$400,000,000 (or such greater amount as may be permitted from time to time pursuant to the Term Loan Documents and any Permitted Term Loan Facility Refinancing)~~ 600,000,000;

(g) Sale and Leaseback Transactions permitted under Section 6.03;

(h) Indebtedness in respect of bid, performance or surety bonds or obligations, workers' compensation claims, self-insurance obligations, financing of insurance premiums, and bankers acceptances issued for the account of the ~~Parent Borrower~~ Designated Company or any Restricted Subsidiary, in each case, incurred in the ordinary course of business (including guarantees or obligations of the ~~Parent Borrower~~ Designated Company or any Restricted Subsidiary with respect to letters of credit supporting such bid, performance or surety bonds or obligations, workers' compensation claims, self-insurance obligations and bankers acceptances) (in each case other than Indebtedness for borrowed money);

(i) Contingent Obligations (i) of any Loan Party in respect of Indebtedness otherwise permitted to be incurred by such Loan Party under this Section 6.01, (ii) of any Loan Party in respect of Indebtedness of Restricted Subsidiaries that are not Loan Parties or are Restricted Grantors in an aggregate amount not exceeding ~~\$75,000,000 at any one time outstanding~~ the greater of (x) 1.5% of Consolidated Net Tangible Assets and (y) \$100,000,000 less all amounts paid with regard to Contingent Obligations permitted pursuant to Section 6.04(a), and (iii) of any Company that is not a Loan Party in respect of Indebtedness otherwise permitted to be incurred by such Company under this Section 6.01;

(j) Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument inadvertently (except in the case of daylight overdrafts)

drawn against insufficient funds in the ordinary course of business; provided that such Indebtedness is extinguished within five (5) Business Days of incurrence;

(k) Indebtedness arising in connection with endorsement of instruments for deposit in the ordinary course of business;

(l) Additional Unsecured Indebtedness, Additional Senior Secured Indebtedness and Junior Secured Indebtedness not otherwise permitted under this Section 6.01; provided, that (i) no Default is then continuing or would result therefrom and (ii) such Indebtedness is incurred by a Loan Party, and the persons that are (or are required to be) obligors under such Indebtedness do not consist of any persons other than those persons that are (or are required to be) Loan Parties; provided, further that delivery to the Administrative Agent at least five Business Days prior to the incurrence of such Indebtedness of an Officer's Certificate of a Responsible Officer of the Administrative Borrower (together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto) certifying that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the applicable requirements for such Indebtedness shall be conclusive evidence that such terms and conditions satisfy such requirement unless the Administrative Agent notifies the Administrative Borrower within such five Business Day period that it disagrees with such determination (including a reasonable description of the basis upon which it disagrees);

(m) Indebtedness consisting of working capital facilities, lines of credit or cash management arrangements for Restricted Subsidiaries and Contingent Obligations of Restricted Subsidiaries in respect thereof; provided that no Default shall be outstanding, on a Pro Forma Basis, after giving effect thereto and (A) such transaction is a Permitted German Alternative Financing, (B) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Principal Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Principal Jurisdiction then outstanding under this Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a Non-Principal Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Principal Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000 or (C) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Loan Party Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Loan Party Jurisdiction then outstanding under this Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a NonLoan Party Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Loan Party Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000;

(n) Indebtedness in respect of indemnification obligations or obligations in respect of purchase price adjustments or similar obligations incurred or assumed by the Loan Parties and their Subsidiaries in connection with (i) an Asset Sale or sale of Equity Interests otherwise permitted under this Agreement and (ii) Permitted Acquisitions or other Investments permitted under Section 6.04;

(o) unsecured guaranties in the ordinary course of business of any person of the obligations of suppliers, customers, lessors or licensees;

(p) Indebtedness of NKL arising under letters of credit issued in the ordinary course of business;

(q) (i) Indebtedness of any person existing at the time such person is acquired in connection with a Permitted Acquisition or any other Investment permitted under Section 6.04; provided that (A) such Indebtedness is not incurred in connection with or in contemplation of such Permitted Acquisition or other Investment, (B) such Indebtedness is not secured by property of any Company organized in a Principal Jurisdiction or the proceeds thereof, (C) if such Indebtedness is secured, (I) such Indebtedness becomes Pari Passu Secured Obligations subject to the Intercreditor Agreement, (II) such Liens become Junior Liens subject to the Intercreditor Agreement, or (III) the Liens securing such Indebtedness do not attach to any Collateral or other property of any Loan Party and (D) at the time of such Permitted Acquisition or other Investment, no Event of Default shall have occurred and be continuing, and (ii) Permitted Refinancings of such Indebtedness in an aggregate amount, for all such Indebtedness permitted under this clause (q), not to exceed the greater of \$350,000,000 and 7.5% of Consolidated Net Tangible Assets at any time outstanding;

(r) Indebtedness in respect of treasury, depository and cash management services or automated clearinghouse transfer of funds (including the Cash Pooling Arrangements and other pooled account arrangements and netting arrangements and commercial credit card and merchant card services and other bank products or services, but excluding letters of credit and Hedging Obligations) in the ordinary course of business, in each case, arising under the terms of customary agreements with any bank (other than Bank Product Agreements with Secured Bank Product Providers) at which such Restricted Subsidiary maintains an overdraft, pooled account or other similar facility or arrangement; provided that this clause (r) shall not permit any Excluded Bank Product Debt or any obligations in respect of Excluded Bank Products;

(s) Permitted Holdings Indebtedness;

(t) Indebtedness constituting the ~~New~~ Senior Notes in an aggregate principal amount not to exceed ~~\$2,500,000,000~~ 2,650,000,000, and Permitted Refinancings thereof (including successive Permitted Refinancings of Indebtedness incurred as a Permitted Refinancing under this clause (t));

(u) ~~intentionally omitted~~ Permitted Short Term Indebtedness;

(v) Permitted Unsecured Refinancing Debt, and any Permitted Refinancing thereof;

(w) Permitted First Priority Refinancing Debt and Permitted Second Priority Refinancing Debt, and any Permitted Refinancings thereof;

(x) obligations of the ~~Parent-Borrower~~ Designated Company, or any of its Restricted Subsidiaries to reimburse or refund deposits posted by customers pursuant to forward sale agreements entered into by the ~~Parent-Borrower~~ Designated Company or such Restricted Subsidiary in the ordinary course of business;

(y) Indebtedness not otherwise permitted under this Section 6.01 in an aggregate principal amount not to exceed the greater of (x) 10% of Consolidated Net Tangible Assets and (y) ~~\$500,000,00~~\$500,000,000 at any time outstanding; provided, that such Indebtedness shall be unsecured unless meeting the requirements for Additional Senior Secured Indebtedness, Junior Secured Indebtedness, or Other Secured Indebtedness, in which event such Indebtedness may be incurred as Indebtedness of such type so long as (i) no Default is then continuing or would result therefrom and (ii) in the case of Additional Senior Secured Indebtedness or Junior Secured Indebtedness, such Indebtedness is incurred by a Loan Party, and the persons that are (or are required to be) obligors under such Indebtedness do not consist of any persons other than those persons that are (or are required to be) Loan Parties; provided, further that, with respect to incurrence of Additional Senior Secured Indebtedness, Junior Secured Indebtedness, or Other Secured Indebtedness, delivery to the Administrative Agent at least five Business Days prior to the incurrence of such Indebtedness of an Officer's Certificate of a Responsible Officer of the Administrative Borrower (together with a reasonably detailed description of the material terms and conditions of such Indebtedness or drafts of the documentation relating thereto) certifying that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the applicable requirements for such Indebtedness shall be conclusive evidence that such terms and conditions satisfy such requirement unless the Administrative Agent notifies the Administrative Borrower within such five Business Day period that it disagrees with such determination (including a reasonable description of the basis upon which it disagrees);

(z) (i) unsecured Indebtedness in respect of obligations of the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary to pay the deferred purchase price of goods or services or progress payments in connection with such goods and services; provided that such obligations are incurred in connection with open accounts extended by suppliers on customary trade terms in the ordinary course of business and not in connection with the borrowing of money or any ~~Hedge~~Hedging Agreements and (ii) unsecured indebtedness in respect of intercompany obligations of the ~~Parent Borrower~~Designated Company or any Restricted Subsidiary in respect of accounts payable incurred in connection with goods sold or services rendered in the ordinary course of business and not in connection with the borrowing of money;

(aa) Indebtedness representing deferred compensation or similar arrangements to employees, consultants or independent contractors of the ~~Parent Borrower~~Designated Company (or its direct or indirect parent) and its Restricted Subsidiaries incurred in the ordinary course of business or otherwise incurred in connection with the Transactions or any Permitted Acquisition or other Investment permitted under Section 6.04;

(bb) Indebtedness consisting of promissory notes issued to current or former officers, managers, consultants, directors and employees (or respective spouses, former spouses, successors, executors, administrators, heirs, legatees or distributees) to finance the purchase or redemption of capital stock of the ~~Parent Borrower~~Designated Company or any of its direct or indirect parent companies permitted by Section 6.08(i); ~~and~~

(cc) Indebtedness pursuant to industrial revenue bond, direct government loan or similar programs in an aggregate principal amount not to exceed the greater of (x) 3% of Consolidated Net Tangible Assets and (y) \$150,000,000 at any time outstanding (or such greater amount as may be permitted from time to time pursuant to the Term Loan Documents and any Permitted Term Loan Facility Refinancing); ~~and~~

(dd) Surviving Aleris Debt and Indebtedness of one or more Companies organized under the laws of the People's Republic of China and, in each case, Permitted Refinancings thereof; provided that (i) the obligations in respect of the foregoing shall not be secured by any assets of, and shall not be guaranteed by, any Person, other than the assets of, and guarantees by, one or more Companies organized under the laws of the People's Republic of China that is not a Loan Party, and (ii) the aggregate principal amount of Indebtedness and undrawn commitments thereunder shall not exceed \$300,000,000 at any time outstanding.

Notwithstanding anything to the contrary contained in this Section 6.01 or Section 6.02 (and with effect solely at such times that a provision of comparable effect is included in the Term Loan Documents and any Permitted Term Loan Facility Refinancing, in each case from time to time outstanding), accrual of interest, accretion or amortization of original issue discount and the payment of interest in the form of additional Indebtedness will be deemed not to be an incurrence of Indebtedness for purposes of this covenant.

SECTION 6.02 Liens. Create, incur, assume or permit to exist, directly or indirectly, any Lien on any property now owned or hereafter acquired by it or on any income or revenues or rights in respect of any thereof, except the following (collectively, the "**Permitted Liens**");

(a) (i) inchoate Liens for Taxes not yet due and payable or delinquent and (ii) Liens for Taxes which are due and payable and are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided on the books of the appropriate Company in accordance with U.S. GAAP;

(b) Liens in respect of property of any Company imposed by Applicable Law (other than Liens in respect of Canadian Pension Plans), which were incurred in the ordinary course of business and do not secure Indebtedness for borrowed money, such as carriers', warehousemen's, materialmen's, landlords', workmen's, suppliers', repairmen's and mechanics' Liens and other similar Liens arising in the ordinary course of business, and (i) which do not in the aggregate materially detract from the value of the property of the Companies, taken as a whole, and do not materially impair the use thereof in the operation of the business of the Companies, taken as a whole, and (ii) which, if they secure obligations that are then due and unpaid for more than 30 days, are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided on the books of the appropriate Company in accordance with U.S. GAAP;

(c) any Lien in existence on the Amendment No. ~~+2~~ Effective Date and set forth on Schedule 6.02(c) to Amendment No. ~~+2~~ that does not attach to the Accounts and Inventory of any Borrower or Borrowing Base Guarantor and any Lien granted as a replacement, renewal or substitution therefor; provided that any such replacement, renewal or substitute Lien (i) does not secure an aggregate amount of Indebtedness, if any, greater than that secured on the Amendment No. ~~+2~~ Effective Date (including undrawn commitments thereunder in effect on the Amendment No. ~~+2~~ Effective Date, accrued and unpaid interest thereon and fees and premiums payable in connection with a Permitted Refinancing of the Indebtedness secured by such Lien) and (ii) does not encumber any property other than the property subject thereto on the Amendment No. ~~+2~~ Effective Date (any such Lien, an “Existing Lien”);

(d) easements, rights-of-way, restrictions (including zoning restrictions), reservations (including pursuant to any original grant of any Real Property from the applicable Governmental Authority), covenants, licenses, encroachments, protrusions and other similar charges or encumbrances, and minor title deficiencies or irregularities on or with respect to any Real Property, in each case whether now or hereafter in existence, not (i) securing Indebtedness for borrowed money or (ii) individually or in the aggregate materially interfering with the ordinary conduct of the business of the Companies at such Real Property;

(e) Liens arising out of judgments, attachments or awards not resulting in an Event of Default that are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been provided on the books of the appropriate Company in accordance with U.S. GAAP;

(f) Liens (other than any Lien imposed by ERISA) (x) imposed by Applicable Law or deposits made in connection therewith in the ordinary course of business in connection with workers’ compensation, unemployment insurance and other types of social security legislation, (y) incurred in the ordinary course of business to secure the performance of tenders, statutory obligations (other than excise taxes), surety, stay, customs and appeal bonds, statutory bonds, bids, leases, government contracts, trade contracts, performance and return of money bonds and other similar obligations (exclusive of obligations for the payment of borrowed money) or (z) arising by virtue of deposits made in the ordinary course of business to secure liability for premiums to insurance carriers; provided that (i) with respect to clauses (x), (y) and (z) of this paragraph (f), such Liens are for amounts not yet due and payable or delinquent or, to the extent such amounts are so due and payable, such amounts are being contested in good faith by appropriate proceedings diligently conducted and for which adequate reserves have been established on the books of the appropriate Company in accordance with U.S. GAAP, and (ii) to the extent such Liens are not imposed by Applicable Law, such Liens shall in no event encumber any property other than cash and Cash Equivalents and, with respect to clause (y), property relating to the performance of obligations secured by such bonds or instruments;

(g) (i) Leases, subleases or licenses of the properties of any Company (other than Accounts and Inventory) granted to other persons which do not, individually or in the aggregate, interfere in any material respect with the ordinary conduct of the business of any Company and (ii) interests or title of a lessor, sublessor, licensor or sublicensor or Lien securing a lessor’s, sublessor’s, licensor’s or sublicensor’s interest in any lease or license not prohibited by this Agreement;

(h) Liens arising out of conditional sale, hire purchase, title retention, consignment or similar arrangements for the sale of goods entered into by any Company in the ordinary course of business and which do not attach to Accounts or Inventory that is included in the calculation of the Borrowing Base, except to the extent explicitly permitted by the definition of “Eligible Accounts” or “Eligible Inventory,” as applicable;

(i) Liens securing Indebtedness incurred pursuant to Section 6.01(f) or Section 6.01(g); provided that any such Liens do not attach to Accounts or Inventory and attach only to the property being financed pursuant to such Indebtedness and any proceeds of such property and do not encumber any other property of any Company (other than pursuant to customary cross-collateralization provisions with respect to other property of a Company that also secures Indebtedness owed to the same financing party or its Affiliates that is permitted under Section 6.01(f) or Section 6.01(g));

(j) (i) Liens that are contractual rights of set-off (A) relating to the establishment of depository relations with banks, (B) relating to pooled deposit or sweep accounts of any Company to permit satisfaction of overdraft or similar ~~obligation~~obligations and other cash management activities incurred in the ordinary course of business of the Companies or (C) relating to purchase orders and other similar agreements entered into with customers of the Companies in the ordinary course of business, (ii) Liens of a collection bank arising under

Section 4-210 of the Uniform Commercial Code on items in the course of collection, (iii) Liens encumbering reasonable customary initial deposits and, to the extent required by ~~Applicable Law~~applicable law, margin deposits, in each case attaching to commodity trading accounts or other brokerage accounts incurred in the ordinary course of business and (iv) Liens in favor of banking institutions, securities intermediaries and clearing agents (including the right of set-off) and which are within the general parameters customary in the banking industry and not granted in connection with the incurrence of Indebtedness; provided that Liens under this clause (j) shall not secure any Excluded Bank Product Debt or any obligations in respect of Excluded Bank Products;

(k) (i) Liens granted pursuant to the Loan Documents to secure the Secured Obligations, (ii) pursuant to the Pari Passu Loan Documents to secure the Pari Passu Secured Obligations and any Permitted Refinancings thereof, (iii) Liens securing Permitted First Priority Refinancing Debt and Permitted Second Priority Refinancing Debt, (iv) Liens securing Additional Senior Secured Indebtedness that are pari passu with the Liens securing the Pari Passu Secured Obligations and subject to the terms of the Intercreditor Agreement and, to the extent such Liens attach to Revolving Credit Priority Collateral, such Liens shall be junior to the Liens securing the Secured Obligations, (v) Liens securing Junior Secured Indebtedness that are subordinated to the Liens granted under the Security Documents or

otherwise securing the Secured Obligations and subject to the terms of the Intercreditor Agreement and (vi) Liens securing Other Secured Indebtedness that do not attach to any Collateral or other property of any Loan Party;

(l) licenses of Intellectual Property granted by any Company in the ordinary course of business and not interfering in any material respect with the ordinary conduct of business of the Companies;

(m) the filing of UCC or PPSA financing statements (or the equivalent in other jurisdictions) solely as a precautionary measure in connection with operating leases or consignment of goods;

(n) (x) Liens on property of Excluded Subsidiaries securing Indebtedness of Excluded Subsidiaries permitted by Section 6.01(m), (y) Liens on property of ~~Novelis Deutschland GmbH~~ German Borrower consisting of Revolving Credit Priority Collateral and Hedging Agreements related to the value of such Revolving Credit Priority Collateral securing a Permitted German Alternative Financing incurred by such German Borrower and permitted by Section 6.01(m) and (z) Liens on property of NKL securing Indebtedness permitted by Section 6.01(p);

(o) Liens securing the refinancing of any Indebtedness secured by any Lien permitted by clauses (c), (i), (k) or (r) of this Section 6.02 or this clause (o) without any change in the assets subject to such Lien and to the extent such refinanced Indebtedness is permitted by Section 6.01;

(p) to the extent constituting a Lien, the existence of ~~the an~~ “equal and ratable” clause in the ~~New~~ Senior Note Documents ~~or any Indebtedness constituting unsecured senior notes incurred pursuant to Sections 6.01(l) or (y) (and any Permitted Refinancings of any of the foregoing) thereof) and other debt securities issued by a Loan Party that are permitted under Section 6.01~~ (but, in each case, not any security interests granted pursuant thereto);

(q) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties in connection with the importation of goods in the ordinary course of business;

(r) Liens on assets acquired in a Permitted Acquisition or other Acquisitions permitted under Section 6.04 or on property of a person (in each case, other than Accounts or Inventory owned by a Company organized or doing business in a Principal Jurisdiction) existing at the time such person is acquired or merged with or into or amalgamated or consolidated with any Company to the extent permitted hereunder or such assets are acquired (and not created in anticipation or contemplation thereof); provided that (i) such Liens do not extend to property not subject to such Liens at the time of acquisition (other than improvements thereon and proceeds thereof) and are no more favorable to the lienholders than such existing Lien and (ii) (x) such Liens secure obligations in respect of Indebtedness permitted under Section 6.01(dd), so long as such Liens do not extend to any assets of any Person other than the assets of one or more Companies organized under the laws of the People's Republic of China that is not a Loan Party, or (y) the aggregate principal amount of Indebtedness secured by such Liens does not exceed ~~\$100,000,000~~ the greater of (1) 2% of Consolidated Net Tangible Assets and (2) \$200,000,000 at any time outstanding;

(s) any encumbrance or restriction (including put and call agreements) solely in respect of the Equity Interests of any Joint Venture or Joint Venture Subsidiary that is not a Loan Party, contained in such Joint Venture's or Joint Venture Subsidiary's Organizational Documents or the joint venture agreement or stockholders agreement in respect of such Joint Venture or Joint Venture Subsidiary;

(t) (A) Liens granted in connection with Indebtedness permitted under Section 6.01(e) that are limited in each case to the Securitization Assets transferred or assigned pursuant to the related Qualified Securitization Transaction and (B) Liens granted in connection with a Permitted Factoring Facility pursuant to Section 6.06(e) that are limited in each case to precautionary Liens on the Receivables sold, transferred or disposed of pursuant to such transaction, and Liens on the other Factoring Assets with respect thereto;

(u) Liens not otherwise permitted by this Section 6.02 (but excluding however any consensual Lien on any Revolving Credit Priority Collateral other than ~~that of~~ Revolving Credit Priority Collateral of (i) Excluded Subsidiaries or (ii) any Company that is organized in a Non-Principal Jurisdiction) securing liabilities not in excess of the greater of (x) 2% of Consolidated Net Tangible Assets and (y) \$100,000,000 in the aggregate at any time outstanding;

(v) to the extent constituting Liens, rights under purchase and sale agreements with respect to Equity Interests or other assets permitted to be sold in Asset Sales permitted under Section 6.06;

(w) Liens securing obligations owing to the Loan Parties so long as such obligations and Liens, where owing by or on assets of Loan Parties, are subordinated to the Secured Obligations and to the Secured Parties' Liens on the Collateral in a manner satisfactory to the Administrative Agent;

(x) Liens created, arising or securing obligations under the Receivables Purchase Agreements;

(y) Liens on deposits provided by customers or suppliers in favor of such customers or suppliers securing the obligations of the ~~Parent Borrower~~ Designated Company or its Restricted Subsidiaries to refund deposits posted by customers or suppliers pursuant to forward sale agreements entered into by the ~~Parent Borrower~~ Designated Company or its Restricted Subsidiaries in the ordinary course of business;

(z) Liens on cash advances in favor of the seller of any property to be acquired in an Investment permitted pursuant to Section 6.04 to be applied against the purchase price for such Investment;

(aa) ~~Liens pursuant to the Forward Share Sale Agreement;~~ (i) cash collateral securing Indebtedness incurred pursuant to Section 6.01(h) and (ii) commencing on the Aleris Acquisition Closing Date and ending on the date that is 180 days after such date, cash collateral securing obligations under the Specified Aleris Hedging Agreements;

(bb) Liens in favor of any underwriter, depositary or stock exchange on the Equity Interests in NKL or its direct parents, 4260848 Canada Inc., 4260856 Canada Inc., and 8018227 Canada Inc., and any securities accounts in which such Equity Interests are held in connection with any listing or offering of Equity Interests in NKL, to the extent required by Applicable Law or stock exchange requirements (and not securing Indebtedness);

(cc) Liens arising under Canadian pension benefits statutes: (i) to the extent that the amount secured by such Liens does not exceed the amount of Priority Payables or Canadian Pension Plan Reserve maintained hereunder in respect of pension related Liens, or permitted to be maintained hereunder; or (ii) that arise in the ordinary course absent any wind up or partial wind up or failure to make a contribution to a Canadian Pension Plan when due, including in respect of employee contributions not yet remitted to a Canadian Pension Plan; ~~and~~

(dd) Liens securing Indebtedness incurred pursuant to Section 6.01(cc); provided that any such Liens do not attach to Revolving Credit Priority Collateral;

(ee) bankers' Liens, rights of setoff and other similar Liens existing solely with respect to cash and Cash Equivalents on deposit in one or more accounts maintained by any Company, in each case granted in the ordinary course of business in favor of the bank or banks with which such accounts are maintained, securing amounts owing to such bank with respect to treasury, depositary and cash management services or automated clearinghouse transfer of funds (including pooled account arrangements and netting arrangements or claims against any clearing agent or custodian with respect thereto); provided that, unless such Liens are non-consensual and arise by operation of law, in no case shall any such Liens secure (either directly or indirectly) the repayment of any other Indebtedness; provided, further, that such Liens shall not secure any Excluded Bank Product Debt or any obligations in respect of Excluded Bank Products; and

(ff) the pledge of Qualified Capital Stock of any Unrestricted Subsidiary.

provided, however, that notwithstanding any of the foregoing, no consensual Liens (other than Liens permitted under clauses (s), (v) and (bb) above, in the case of Securities Collateral or Chinese Subsidiary Equity Interests, and clause (h) above (to the extent permitted thereby), in the case of Accounts or Inventory) shall be permitted to exist, directly or indirectly, on any Securities Collateral or any Chinese Subsidiary Equity Interests, or on any Accounts or Inventory of any Borrower, Borrowing Base Guarantor or other Company organized or conducting business in, or having assets located in, a Principal Jurisdiction, other than Liens granted pursuant to the applicable Security Documents ~~or~~ and so long as such Lien is also granted pursuant to the applicable Security Documents, the Pari Passu Security Documents, or any agreement, document or instrument pursuant to which any Lien is granted securing any Additional Senior Secured Indebtedness, Permitted First Priority Refinancing Debt, Permitted Second Priority Refinancing Debt or Junior Secured Indebtedness.

Any reference in this Agreement or any of the other Loan Documents to a Lien permitted by this Agreement is not intended to subordinate or postpone, and shall not be interpreted as subordinating or postponing, or as an agreement to subordinate or postpone, any Lien created by any of the Loan Documents to any Lien permitted hereunder.

SECTION 6.03 Sale and Leaseback Transactions. Enter into any arrangement, directly

or indirectly, with any person whereby it shall sell or transfer any property, real or personal, used or useful in its business, whether now owned or hereafter acquired, and thereafter rent or lease such property or other property which it intends to use for substantially the same purpose or purposes as the property being sold or transferred (a "**Sale and Leaseback Transaction**") unless (i) the sale of such property is permitted by Section 6.06, (ii) any Liens arising in connection with its use of such property are permitted by Section 6.02 and (iii) after giving effect to such Sale and Leaseback Transaction, the aggregate fair market value of all properties covered by Sale and Leaseback Transactions entered into would not exceed (A) in the case of a Sale and Leaseback Transaction constituting Indebtedness incurred pursuant to Section 6.01(cc), the greater of (x) \$150,000,000 and (y) 3% of Consolidated Net Tangible Assets at any time and (B) in the case of all other Sale and Leaseback Transactions, the greater of (x) \$250,000,000 and (y) 5% of Consolidated Net Tangible Assets..

SECTION 6.04 Investments, Loan and Advances. Directly or indirectly, lend money or credit (by way of guarantee or otherwise) or make advances to, any person, or purchase or acquire any stock, bonds, notes, debentures or other obligations or securities of, or any other ownership interest in, or make any capital contribution to, any other person, or purchase or otherwise acquire (in one transaction or a series of transactions) all or substantially all of the property and assets or business of any other person or assets constituting a business unit, line of business or division of any other person, or purchase or own a futures contract or otherwise become liable for the purchase or sale of currency or other commodities at a future date in the nature of a futures contract (all of the foregoing, collectively, "**Investments**"; it being understood that (x) the amount of any

Investment shall be the amount actually invested, without adjustment for subsequent increases or decreases in the value of such Investment and when determining the amount of an Investment that remains outstanding, the last paragraph of this Section 6.04 shall apply, (y) in the event a Restricted Subsidiary ceases to be a Restricted Subsidiary as a result of being designated an Unrestricted Subsidiary, the ~~Parent Borrower~~ Designated Company will be deemed to have made an Investment in such Unrestricted Subsidiary as of the date of such designation, as provided in Section 5.17 and (z) in the event a Restricted Subsidiary ceases to be a Restricted Subsidiary as a result of an Asset Sale or similar transaction, and the ~~Parent Borrower~~ Designated Company and its Restricted Subsidiaries continue to own Equity Interests in such Restricted Subsidiary, the ~~Parent Borrower~~ Designated Company will be deemed, at the time of such transaction and after giving effect thereto, to have made an Investment in such Person equal to the fair market value of the ~~Parent Borrower's~~ Designated Company's and its Restricted Subsidiaries' Investments in such Person at such time), except that the following shall be permitted:

(a) Investments consisting of unsecured guaranties by Loan Parties of, or other unsecured Contingent Obligations with respect to, operating payments not constituting Indebtedness for borrowed money incurred by Restricted Subsidiaries that are not Loan Parties or that are Restricted Grantors, in the ordinary course of business, that, to the extent paid by such Loan Party, shall not exceed an aggregate amount equal to the greater of (x) 1.5% of Consolidated Net Tangible Assets and (y) ~~\$75,000,000~~ 100,000,000 less the amount of Contingent Obligations by Loan Parties in respect of Companies that are not Loan Parties or that are Restricted Grantors permitted pursuant to Section 6.01(i)(ii);

(b) Investments outstanding on the Amendment No. ~~+2~~ Effective Date and identified on Schedule 6.04(b) to Amendment No. ~~+2~~;

(c) the Companies may (i) acquire and hold accounts receivable owing to any of them if created or acquired in the ordinary course of business or in connection with a Permitted Acquisition or other Acquisition permitted under Section 6.04, (ii) invest in, acquire and hold cash and Cash Equivalents, (iii) endorse negotiable instruments held for collection in the ordinary course of business or (iv) make lease, utility and other similar deposits in the ordinary course of business;

(d) Investments of Securitization Assets in Securitization Entities in connection with Qualified Securitization Transactions permitted by Section 6.01(e);

(e) the Loan Parties and their Restricted Subsidiaries may make loans and advances (including payroll, travel and entertainment related advances) in the ordinary course of business to their respective employees (other than any loans or advances to any director or executive officer (or equivalent thereof) that would be in violation of Section 402 of the Sarbanes-Oxley Act) so long as the aggregate principal amount thereof at any time outstanding (determined without regard to any write-downs or write-offs of such loans and advances) shall not exceed (when aggregated with loans and advances outstanding pursuant to clause (h) below) \$15,000,000;

(f) any Company may enter into Hedging Agreements (including Contingent Obligations of any Company with respect to Hedging Obligations of any other Company) to the extent permitted by Section 6.01(c);

(g) Investments made by any Company as a result of consideration received in connection with an Asset Sale made in compliance with Section 6.06; provided that if such Investment or Asset Sale involves a Transferred Aleris Foreign Subsidiary, such transaction shall comply with the requirements set forth in the definition of Permitted Aleris Foreign Subsidiary Transfer;

(h) loans and advances to directors, employees and officers of the Loan Parties and their Restricted Subsidiaries for *bona fide* business purposes, in aggregate amount not to exceed (when aggregated with loans and advances outstanding pursuant to clause (e) above) \$15,000,000 at any time outstanding; provided that no loans in violation of Section 402 of the Sarbanes-Oxley Act shall be permitted hereunder;

(i) Investments (i) by any Company in any other Company outstanding on the ~~Closing~~ Amendment No. 2 Effective Date, (ii) by any Company in any Unrestricted Grantor, (iii) by any Restricted Grantor in any other Restricted Grantor, (iv)(A) by an Unrestricted Grantor in any Restricted Grantor up to the greater of (x) 2% of Consolidated Net Tangible Assets and (y) \$100,000,000 in the aggregate at any one time outstanding made in reliance on this clause (i)(iv)(A) and (B) by an Unrestricted Grantor in any Restricted Grantor (or by any Loan Party in any Company that is not a Loan Party) so long as, on a Pro Forma Basis (Leverage) after giving effect to and at the time of such Investment, no Default shall be outstanding and (I) the Consolidated Interest Coverage Ratio shall be greater than 2.0 to 1.0 (provided that such minimum Consolidated Interest Coverage Ratio shall only apply to the extent a minimum Consolidated Interest Coverage Ratio test is applicable with respect to such transactions under Section 6.04(i)(iv) of the Term Loan Credit Agreement, or any successor provision, at such time) and (II) Excess Availability is not less than 15% of the lesser of (1) the Total Revolving Commitment and (2) the Total Borrowing Base, and (v) by any Company that is not a Loan Party in any other Company, ~~and (vi) constituting Equity Interests transferred to a U.S. Borrower pursuant to Section 6.09(n)~~;

(j) Investments in securities or other obligations received upon foreclosure or pursuant to any plan of reorganization or liquidation or similar arrangement upon the bankruptcy or insolvency of trade creditors or customers or in connection with the settlement of delinquent accounts in the ordinary course of business, and Investments received in good faith in settlement of disputes or litigation;

(k) Investments in Joint Ventures in which the Loan Parties hold at least 50% of the outstanding Equity Interests or Joint Venture Subsidiaries made with the Net Cash Proceeds of Asset Sales made in accordance with Section 6.06(k);

(l) Investments in Norf GmbH in an aggregate amount not to exceed €100,000,000 at any time outstanding;

(m) Permitted Acquisitions;

(n) so long as the Availability Conditions are satisfied at the time of consummation of the Investment and payment of the consideration therefor, Investments not otherwise permitted hereby, including other Investments in any Subsidiary of any Loan Party;

(o) Mergers, amalgamations and consolidations in compliance with Section 6.05; provided that the Lien on and security interest in such Investment granted or to be granted in favor of the Collateral Agent under the Security Documents shall be maintained or created in accordance with the provisions of Section 5.11 or Section 5.12, as applicable;

(p) Investments in respect of Cash Pooling Arrangements, subject to the limitations set forth in Section 6.07;

(q) Investments consisting of guarantees of Indebtedness referred to in clauses (i) (to the extent such guarantee is in effect on the ~~Closing~~ Amendment No. 2 Effective Date

or permitted as part of a Permitted Refinancing), (ii), (iii) and (iv) of Section 6.01(b) and Contingent Obligations permitted by Section 6.01(c) or (i);

(r) other Investments in an aggregate amount not to exceed ~~\$100,000,000~~ 150,000,000 at any time outstanding;

(s) Investments by any Company in any other Company; provided that such Investment is part of a Series of Cash Neutral Transactions and no Default has occurred and is continuing;

(t) Investments consisting of unsecured guaranties permitted pursuant to Section 6.01(o);

(u) Investments consisting of Standard Factoring Undertakings in respect of Permitted Factoring Facilities pursuant to Section 6.06(e);

(v) Investments consisting of (i) unsecured guaranties by Novelis Inc. of NKL's indemnification obligations owing to (x) the Ulsan JV Subsidiary attributable to employment-related claims or claims of former employees of NKL, and (y) the Ulsan Joint Venture Partner for losses of the Ulsan Joint Venture Partner arising from NKL's breach of representations, warranties and covenants applicable to NKL under the Ulsan Sale Agreement; provided that Novelis Inc.'s maximum aggregate liability under the guaranties described in this clause (i) shall not exceed \$157,500,000, and (ii) an unsecured guaranty by Novelis Inc. of NKL's indemnification obligations owing to the Ulsan JV Subsidiary for losses of the Ulsan JV Subsidiary arising from environmental liabilities that relate to actions occurring prior to the closing of the Ulsan Share Sale; provided that Novelis Inc.'s maximum aggregate liability under the guaranty described in this clause (ii) shall not exceed \$157,500,000; ~~and~~

(w) ~~“(w)”~~ Investments in Ulsan JV Subsidiary in an aggregate amount not to exceed ₩125,000,000,000 at any time outstanding;

(x) to the extent constituting an Investment, (i) the Permitted Reorganization; provided that the terms and conditions set forth in the definition of Permitted Reorganization and, to the extent applicable, the definition of Permitted Reorganization Actions shall have been satisfied; provided, further, that all such Investments involving a loan or advance, or otherwise in the form of an Intercompany Note, shall be documented as an Intercompany Note and shall be subordinated to the Secured Obligations (to the extent evidencing a payment obligation of a Loan Party) on terms reasonably satisfactory to the Administrative Agent, and shall be pledged as Collateral pursuant to the Security Documents, and (ii) the Permitted Aleris Foreign Subsidiary Transfers; and

(y) Permitted Fiscal Unity Liability;

provided that any such Investment in the form of a loan or advance to any Loan Party ~~(other than the Forward Share Sale Agreement)~~ shall be subordinated to the Secured Obligations on terms reasonably satisfactory to the Administrative Agent and, in the case of a loan or advance by a Loan Party, evidenced by an Intercompany Note and pledged by such Loan Party as Collateral pursuant to the Security Documents; and provided, further, that with respect to any Acquisition (regardless of whether a Permitted Acquisition), the Loan Parties shall fulfill the requirements of clauses (i) ~~-through~~ (viii) of the definition of “Permitted Acquisition.”

An Investment shall be deemed to be outstanding to the extent not returned in the same form as the original Investment to any Company. The outstanding amount of an Investment shall, in the case of a Contingent Obligation that has been terminated, be reduced to the extent no payment is or was made with respect to such Contingent Obligation upon or prior to the termination of such Contingent Obligation; and the outstanding amount of other Investments shall be reduced by the amount of cash or Cash Equivalents received with respect to such Investment upon the sale or disposition thereof, or constituting a return of capital with respect thereto or, repayment of the principal amount thereof, in the case of a loan or advance. No property acquired by any Borrower or Borrowing Base Guarantor in connection with any Investment permitted under this Section 6.04 shall be permitted to be included in the Borrowing Base until the Collateral Agent has received and approved, in the Administrative Agent's Permitted Discretion, (A) a collateral audit with respect to such property, conducted by an independent appraisal firm reasonably acceptable to Administrative Agent, (B) all UCC or other search results necessary to confirm the Collateral Agent's Lien on all of such property of such Borrowing Base Guarantor, which Lien is a First Priority Lien with regard to any Revolving Credit Priority Collateral, and (C) such customary

certificates (including a solvency certificate), resolutions, financial statements, legal opinions, and other documentation as the Administrative Agent may reasonably request (including as required by Sections 5.11 and 5.12).

SECTION 6.05 Mergers, Amalgamations and Consolidations. Wind up, liquidate or dissolve its affairs or enter into any transaction of merger, amalgamation or consolidation (or agree to do any of the foregoing at any future time), except that the following shall be permitted:

(a) Asset Sales in compliance with Section 6.06;

(b) Permitted Acquisitions in compliance with Section 6.04;

(c) (i) any Company may merge, amalgamate or consolidate with or into any Unrestricted Grantor (provided that (A) in the case of any merger, amalgamation or consolidation under this clause (i) involving Designated Holdco, Designated Holdco is the surviving or resulting person, (B) except as provided in the definition of Permitted Holdings Amalgamation, in the case of any merger, amalgamation or consolidation under this clause (i) involving a Borrower, a Borrower is the surviving or resulting person, and in any other case, an Unrestricted Grantor is the surviving or resulting person, (B); provided that no Borrower under this clause (i) (other than a U.S. Borrower, so long as there always exists at least one U.S. Borrower) shall merge, amalgamate or consolidate with or into any other Borrower, (C) in the case of any merger, amalgamation or consolidation involving ~~Parent~~the Canadian Borrower, the surviving or resulting Borrower is organized under the laws of Canada and (D) in the case of any merger or consolidation involving a U.S. Borrower, the surviving Borrower is organized under the laws of the United States (or any state thereof or the District of Columbia), (ii) any Restricted Grantor may merge, amalgamate or consolidate with or into any other Restricted Grantor (provided that (A) except as provided in clause (C) below, in the case of any merger, amalgamation or consolidation under this clause (ii) involving a Borrower, a Borrower is the surviving or resulting person, and in any other case, a Subsidiary Guarantor is the surviving or resulting person and, (B) except as expressly provided in clause (i) above with respect to U.S. Borrowers and in clause (C) below, no Borrower shall merge, amalgamate or consolidate with or into any other Borrower, and (C) subject to the last sentence of this Section 6.05, in the case of any merger, amalgamation or consolidation involving Novelis AG and Novelis Switzerland, either Novelis AG or Novelis Switzerland may be the surviving or resulting Person (any transaction under this clause (C), the “Swiss Merger”)), (iii) Novelis Aluminium Holding Company and Novelis Deutschland GmbH may merge, provided that (A) Novelis Deutschland GmbH is the surviving or resulting person, and (B) if AV Minerals directly owns any Equity Interests in Novelis Aluminium Holding Company immediately prior to giving effect to such merger, then AV Minerals shall be a Loan Party immediately after giving effect to such merger, and Designated Holdco shall not have consummated a Qualified IPO on or prior to the date of such merger, and (iv) any Company that is not a Loan Party may merge, amalgamate or consolidate with or into any Restricted Grantor (provided that a Borrower is the surviving or resulting person in the case of any merger, amalgamation or consolidation involving a Borrower, and in any other case, a Subsidiary Guarantor is the surviving or resulting person); provided that, in the case of each of the foregoing clauses (i) through (iv), (1) the surviving or resulting person is a Wholly Owned Subsidiary of Holdings (provided that following a Qualified ~~Parent~~Canadian Borrower IPO, the surviving or resulting person is the ~~Parent~~Canadian Borrower or a Wholly Owned Subsidiary of ~~Parent~~the Canadian Borrower), (2) the Lien on and security interest in such property granted or to be granted in favor of the Collateral Agent under the Security Documents shall be maintained in full force and effect and perfected and enforceable (to at least the same extent as in effect immediately prior to such transfer) or created in accordance with the provisions of Section 5.11 or Section 5.12, as applicable ~~and~~(for purposes of each step of the Permitted Reorganization, without regard to any time periods provided for in such Sections), (3) no Default is then continuing or would result therefrom, and (4) in the case of any such transaction involving a Borrower where such Borrower is not the surviving or resulting person (solely to the extent this clause (c) permits such Borrower not to survive or be the resulting person), the surviving or resulting person shall expressly assume the obligations of such Borrower pursuant to documentation reasonably satisfactory to the Administrative Agent, and shall enter into all other Loan Documents and deliver such opinions and certificates as are reasonably requested by the Administrative Agent (this clause (4), the “Specified Borrower Merger Requirements”); provided that in the case of any amalgamation or consolidation involving a Loan Party, at the request of the Administrative Agent, such Loan Party and each other Loan Party shall confirm its respective Secured Obligations and Liens under the Loan Documents in a manner reasonably satisfactory to the Administrative Agent;

(d) any Restricted Subsidiary that is not a Loan Party may merge, amalgamate or consolidate with or into any other Restricted Subsidiary that is not a Loan Party;

(e) ~~Holdings~~AV Metals and the ~~Parent~~Canadian Borrower may consummate the Permitted Holdings Amalgamation;

(f) any Restricted Subsidiary of the ~~Parent~~Borrower (other than Designated Company (other than the Canadian Borrower, Novelis Acquisitions (and, immediately after giving effect to the merger of Novelis Acquisitions with and into Aleris in connection with

the Aleris Acquisition, Aleris), Novelis Corporation ~~or a~~and each Receivables Seller) may dissolve, liquidate or wind up its affairs at any time (so long as, (i) in the case of a Borrower, all of its assets are distributed or otherwise transferred to a surviving Borrower organized in the same jurisdiction and (ii) in the case of a Borrowing Base Guarantor, all of its assets are distributed or otherwise transferred to a surviving Borrower or Borrowing Base Guarantor organized in the same jurisdiction); provided that such dissolution, liquidation or winding up, as applicable, could not reasonably be expected to have a Material Adverse Effect; and provided, further, that to the extent any such asset so distributed or otherwise transferred to a Borrower or a Borrowing Base Guarantor constitutes (or would constitute, following the pledge thereof) Revolving Credit Priority Collateral that, after giving effect to such distribution or transfer, becomes subject to the re-starting of any fraudulent conveyance, fraudulent transfer, preference or hardening period, then the Administrative Agent shall be permitted, in its Permitted Discretion, to establish additional Availability Reserves and Reserves with respect to such assets until such new fraudulent conveyance, fraudulent transfer,

preference or hardening period, as applicable, has expired, without regard to any notice period that would otherwise be applicable thereto pursuant to Section 2.1(d);

(g) (i) any Unrestricted Grantor (other than Holdings, ~~the Parent~~Designated Holdco, the Canadian Borrower, Novelis Acquisitions (and, immediately after giving effect to the merger of Novelis Acquisitions with and into Aleris in connection with the Aleris Acquisition, Aleris), Novelis Corporation ~~or~~and each Receivables Seller) may dissolve, liquidate or wind-up its affairs (collectively, “Wind-Up”), so long as all of its assets are distributed or otherwise transferred to any other Unrestricted Grantor (and so long as, (A) in the case of a Borrower, all of its assets are distributed or otherwise transferred to a surviving Borrower organized in the same jurisdiction and (B) in the case of a Borrowing Base

Guarantor, all of its assets are distributed or otherwise transferred to a surviving Borrower or

Borrowing Base Guarantor organized in the same jurisdiction); and (ii) any Restricted Grantor (other than a Receivables Seller) may Wind-Up so long as all of its assets are distributed or otherwise transferred to any other Restricted Grantor (so long as, (A) in the case of a Borrower, all of its assets are distributed or otherwise transferred to a surviving Borrower organized in the same jurisdiction and (B) in the case of a Borrowing Base Guarantor, all of its assets are distributed or otherwise transferred to a surviving Borrower or Borrowing Base Guarantor organized in the same jurisdiction); provided that, in each case, (1) the Lien on and security interest in such property granted or to be granted in favor of the Collateral Agent under the Security Documents shall be maintained in full force and effect and perfected and enforceable (to at least the same extent as in effect immediately prior to such transfer) or created in accordance with the provisions of Section 5.11 or Section 5.12, as applicable and (2) no Default is then continuing or would result therefrom; provided, further, that to the extent any such asset so distributed or otherwise transferred to a Borrower or a Borrowing Base Guarantor constitutes (or would constitute, following the pledge thereof) Revolving Credit Priority Collateral that, after giving effect to such distribution or transfer, becomes subject to the re-starting of any fraudulent conveyance, fraudulent transfer, preference or hardening period, then the Administrative Agent shall be permitted, in its Permitted Discretion, to establish additional Availability Reserves and Reserves with respect to such assets until such new fraudulent conveyance, fraudulent transfer, preference or hardening period, as applicable, has expired, without regard to any notice period that would otherwise be applicable thereto pursuant to Section 2.1(d);

provided that for purposes of clauses (f) and (g), the United States, any state thereof and the District of Columbia shall be treated as the same jurisdiction. Notwithstanding anything in this Agreement or in any other Loan Document to the contrary, no Person shall be permitted to consummate the Swiss Merger at any time that a Permitted Novelis Switzerland Financing exists (which financing, if any, shall be terminated and unwound on terms reasonably acceptable to the Administrative Agent).

SECTION 6.06 Asset Sales. Effect any Asset Sale except that the following shall be permitted:

(a) disposition of used, worn out, obsolete or surplus property by any Company in the ordinary course of business and the abandonment or other disposition of Intellectual Property that is, in the reasonable judgment of ~~Parent Borrower~~the Designated Company, no longer economically practicable to maintain or useful in the conduct of the business of the Companies taken as a whole;

(b) so long as no Default is then continuing or would result therefrom, any other Asset Sale (other than the Equity Interests of (y) any Wholly Owned Subsidiary that is a Restricted Subsidiary unless, after giving effect to any such Asset Sale, such person either ceases to be a Restricted Subsidiary or, in the case of an Excluded Collateral Subsidiary, becomes a Joint Venture Subsidiary or (z) a Borrower) for fair market value, with at least 75% of the consideration received for all such Asset Sales or related Asset Sales in which the consideration received exceeds ~~\$10,000,000~~50,000,000 payable in cash upon such sale (provided, however, that for the purposes of this clause (b), the following shall be deemed to be cash: (i) any liabilities (as shown on the applicable Borrower’s most recent balance sheet provided hereunder or in the footnotes thereto) of the applicable Borrower or applicable Restricted Subsidiary, other than liabilities that are by their terms subordinated to the payment in cash of the Obligations, that are assumed by the transferee with respect to the applicable Asset Sale and for which Holdings, such Borrower and all of its Restricted Subsidiaries shall have been validly released by all applicable creditors in writing, (ii) any securities received by the applicable Borrower or the applicable Restricted Subsidiary from such transferee that are converted by such Borrower or such Restricted Subsidiary into cash (to the extent of the cash received) within 180 days following the closing of the applicable Asset Sale, and (iii) aggregate non-cash consideration received by the applicable Borrower or the applicable Restricted Subsidiary having an aggregate fair market value (determined as of the closing of the applicable Asset Sale for which such non-cash consideration is received) not to exceed ~~\$50,000,000~~75,000,000 at any time (net of any non-cash consideration converted into cash)); provided, however, that with respect to any such Asset Sale pursuant to this clause (b), the aggregate consideration received for all such Asset Sales shall not exceed ~~\$800,000,000~~ in the aggregate after the ~~Closing Date~~Amendment No. 2 Effective Date the sum of (I) \$800,000,000 plus (II) solely in the case of Asset Sales by Companies that are not organized in a Principal Jurisdiction, \$400,000,000 (in the case of this clause (II), solely to the extent that the book value of the Revolving Priority Collateral subject to such Asset Sale does not exceed 25% of the total consideration for such Asset Sale; provided further, however, that, in the case of a sale of Equity Interests of a Borrowing Base Guarantor or Receivables Seller, the Administrative Borrower shall deliver an updated Borrowing Base Certificate at the time of, and giving effect to, such sale, and shall make such mandatory prepayments as may be required (including pursuant to Section 2.10(b)(ix) and (xi), as applicable) in connection therewith;

(c) leases, subleases or licenses of the properties of any Company in the ordinary course of business and which do not, individually or in the aggregate, interfere in any material respect with the ordinary conduct of the business of any Company;

(d) mergers and consolidations, and liquidations and dissolutions in compliance with Section 6.05;

(e) sales, transfers and other dispositions of Receivables for the fair market value thereof in connection with a Permitted Factoring Facility; provided that no Default shall be outstanding, on a Pro Forma Basis, after giving effect thereto, and (A) such transaction is a Permitted

German Alternative Financing, (B) such transaction is a Permitted Customer Account Financing, (C) solely to the extent that the Swiss Merger has not occurred, such transaction is a Permitted Novelis Switzerland Financing, (D) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Principal Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Principal Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables subject to a Permitted Factoring Facility pursuant to this Section 6.06(e) of a Company that is organized in a Non-Principal Jurisdiction at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Principal Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, and Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000 or (E) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a NonLoan Party Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Loan Party Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables subject to a Permitted Factoring Facility pursuant to this Section 6.06(e) of a Company that is organized in a Non-Loan Party Jurisdiction at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Loan Party Jurisdiction for Asset Sales permitted under Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000;

(f) the sale or disposition of cash and Cash Equivalents in connection with a transaction otherwise permitted under the terms of this Agreement;

(g) assignments and licenses of Intellectual Property of any Loan Party and its Subsidiaries in the ordinary course of business and which do not, individually or in the aggregate, interfere in any material respect with the ordinary conduct of the business of any Company;

(h) Asset Sales (other than the Equity Interests of a Borrower, a Borrowing Base Guarantor or a Receivables Seller; provided that this clause (h) shall not prohibit the Swiss Merger to the extent the requirements in clauses (A) and (B) in the proviso below are satisfied at the time the Swiss Merger is consummated) (i) by any Unrestricted Grantor to any other Unrestricted Grantor (other than Holdings), (ii) by any Restricted Grantor to any other Restricted Grantor, (iii) by any Restricted Grantor to any Unrestricted Grantor (other than Holdings) so long as the consideration paid by the Unrestricted Grantor in such Asset Sale does not exceed the fair market value of the property transferred, (iv) by (x) any Unrestricted Grantor to any Restricted Grantor for fair market value and (y) by any Loan Party to any Restricted Subsidiary that is not a Loan Party for fair market value provided that the fair market value of such Asset Sales under this clause (iv) does not exceed the greater of (x) 2% of Consolidated Net Tangible Assets and (y) ~~\$100,000,000~~ 200,000,000 in the aggregate for all such Asset Sales since the Closing Amendment No. 2 Effective Date, (v) by any Company that is not a Loan Party to any Loan Party so long as the consideration paid by the Loan Party in such Asset Sale does not exceed the fair market value of the property transferred, and (vi) by and among Companies that are not Loan Parties; provided that (A) in the case of any transfer from one Loan Party to another Loan Party, any security interests granted to the Collateral Agent for the benefit of any Secured Parties pursuant to the relevant Security Documents in the assets so transferred shall (1) remain in full force and effect and perfected and enforceable (to at least the same extent as in effect immediately prior to such transfer) or (2) be replaced by security interests granted to the Collateral Agent for the benefit of the relevant Secured Parties pursuant to the relevant Security Documents, which new security interests shall be in full force and effect and perfected and enforceable (to at least the same extent as in effect immediately prior to such transfer) and (B) no Default is then continuing or would result therefrom; provided, further, that (I) any Asset Sale of Equity Interests of a Subsidiary of the Designated Company permitted under this clause (h) (such Subsidiary, the "Transferred Company") from an Unrestricted Grantor to a Restricted Grantor shall be conditioned on either the creation or existence of an Interim Holding Company, in each case that (X) is a direct Wholly Owned Subsidiary of such Restricted Grantor and that directly owns 100% of the Equity Interests of such Transferred Company after giving effect to such Asset Sale, (Y) has complied with the Joinder Requirements and (Z) shall not be permitted to own, on and after the date of such action, any assets other than the Permitted Holding Company Assets (II) solely with respect to the pledge of Equity Interests in any Interim Holding Company in connection with a transaction permitted under this clause (h) that complies with the requirements of clauses (I)(X) through (I)(Z) above, the re-starting of any fraudulent conveyance, fraudulent transfer, preference or hardening period with respect to any Security Document or Lien under Applicable Law shall not, in itself, constitute a violation of clause (A)(1) or clause (A)(2) of the second proviso to this clause (h), and (III) any guaranty or pledge limitations under the laws of the jurisdiction of organization of (X) an Interim Holding Company with respect to the enforcement of the pledge of Equity Interests directly held by the Loan Party that owns the Equity Interests of such Interim Holding Company, or (Y) any Restricted Grantor that acquires assets pursuant to this clause (h) with respect to the enforcement of the pledge of such assets acquired by such Restricted Grantor, in the case of clauses (III)(X) and (III)(Y), shall not, in itself, constitute a violation of clause (A)(1) or clause (A)(2) of the second proviso to this clause (h);

(i) the Companies may consummate Asset Swaps, so long as (i) each such sale is in an arm's-length transaction and the applicable Company receives at least fair market value consideration (as determined in good faith by such Company), (ii) the Collateral Agent shall have a First Priority perfected Lien on the assets acquired pursuant to such Asset Swap at least to the same extent as the assets sold pursuant to such Asset Swap (immediately prior to giving effect thereto) and (iii) the aggregate fair market value of all assets sold pursuant to this clause (i) shall not exceed the greater of (x) 1% of Consolidated Net Tangible Assets and (y) \$50,000,000 in the aggregate since the Closing Amendment No. 2 Effective Date; provided that so long as (y) the assets acquired by any Company pursuant to the respective Asset Swap are located in the same

country as the assets sold by such Company and (z) such Asset Swap does not involve a transfer of Revolving Credit Priority Collateral from a Loan Party to a Company that is not a Loan Party, the aggregate cap in clause (iii) above will not apply to such Asset Swap;

(j) sales, transfers and other dispositions of Receivables (whether now existing or arising or acquired in the future) and Related Security to a Securitization Entity in connection with a Qualified Securitization Transaction permitted under Section 6.01(e) and all sales, transfers or other dispositions of Securitization Assets by a Securitization Entity under, and pursuant to, a Qualified Securitization Transaction permitted under Section 6.01(e);

(k) so long as no Default is then continuing or would result therefrom, the arm's length sale or disposition for cash of Equity Interests in a Joint Venture Subsidiary for fair market value or the issuance of Equity Interests in a Joint Venture Subsidiary; provided, however, that the aggregate fair market value of all such Equity Interests sold or otherwise disposed of pursuant to this clause (k) following the Closing Amendment No. 2 Effective Date shall not exceed \$300,000,000;

(l) issuances of Equity Interests by Joint Venture Subsidiaries and Excluded Collateral Subsidiaries;

(m) Asset Sales among Companies of promissory notes or Equity Interests or similar instruments issued by a Company; provided that such Asset Sales are part of a Series of Cash Neutral Transactions and no Default has occurred and is continuing;

(n) the sale of Receivables made pursuant to a Receivables Purchase Agreement;

(o) to the extent constituting an Asset Sale, Investments permitted by Section 6.04(i) and ~~transfers permitted by Section 6.09(n)~~ the Permitted Holdings Amalgamation;

(p) issuances of Qualified Capital Stock (including by way of sales of treasury stock) or any options or warrants to purchase, or securities convertible into, any Qualified Capital Stock (A) for stock splits, stock dividends and additional issuances of Qualified Capital Stock which do not decrease the percentage ownership of the Loan Parties in any class of the Equity Interests of such issuing Company and (B) by Subsidiaries of the ~~Parent Borrower~~ Designated Company formed after the Closing Date to the ~~Parent Borrower~~ Designated Company or the Subsidiary of the ~~Parent Borrower~~ Designated Company which is to own such Qualified Capital Stock; provided that, subject to the Intercreditor Agreement, all Equity Interests issued in accordance with this Section 6.06(p) shall, to the extent required by Section 5.11 or any Security Document or if such Equity Interests are issued by any Loan Party (other than Holdings), be delivered to the Collateral Agent;

(q) Asset Sales of 100% of the Equity Interests of any Chinese Subsidiary of ~~Parent Borrower~~ the Designated Company to a Chinese holding company ~~wholly-owned~~ that is a direct Wholly Owned Subsidiary of ~~Parent Borrower~~ the Designated Company; provided that (i) any security interests granted to the Collateral Agent for the benefit of any Secured Parties pursuant to the relevant Security Documents in the Equity Interests so transferred shall be replaced by security interests granted to the Collateral Agent for the benefit of the relevant Secured Parties pursuant to the relevant Security Documents in 100% of the Equity Interests of such holding company Subsidiary (or 65% if held directly by a U.S. Borrower), which new security interests shall be in full force and effect and perfected and enforceable (to at least the same extent as the security interests in such transferred Subsidiary in effect immediately prior to such transfer), (ii) such transaction is permitted pursuant to the Term Loan Documents (and any Permitted Term Loan Facility Refinancings) and (iii) no Default is then continuing or would result therefrom;

(r) sales, transfers and other dispositions of Inventory by Companies that are not organized in a Principal Jurisdiction (except with respect to a Permitted German Alternative Financing) in order to finance working capital; provided that no Default shall be outstanding, on a Pro Forma Basis, after giving effect thereto and (A) such transaction is a Permitted German Alternative Financing, (B) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Principal Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a NonPrincipal Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a Non-Principal Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Principal Jurisdiction for Asset Sales permitted under this Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000 or (B) the sum of (w) the aggregate outstanding principal amount of the Indebtedness of all Securitization Entities that are organized in a Non-Loan Party Jurisdiction under all Qualified Securitization Transactions under Section 6.01(e), plus (x) the aggregate amount of Indebtedness incurred by a Subsidiary that is organized in a Non-Loan Party Jurisdiction then outstanding under Section 6.01(m), plus (y) the aggregate book value at the time of determination of the then outstanding Receivables of a Company that is organized in a Non-Loan Party Jurisdiction subject to a Permitted Factoring Facility pursuant to Section 6.06(e) at such time, plus (z) the aggregate consideration received by a Company that is organized in a Non-Loan Party Jurisdiction for Asset Sales permitted under this Section 6.06(r) (net of amounts paid by such Company to repurchase the Inventory subject to such Asset Sales) (but in each case excluding any Permitted German Alternative Financing, any Permitted Novelis Switzerland Financing and any Permitted Customer Account Financing), shall not exceed the greater of (x) 15% of Consolidated Net Tangible Assets and (y) \$750,000,000;

(s) so long as the Availability Conditions are satisfied, any other Asset Sale (other than the Equity Interests of (y) any Wholly Owned Subsidiary that is a Restricted

Subsidiary unless, after giving effect to any such Asset Sale, such person either ceases to be a Restricted Subsidiary or, in the case of an Excluded Collateral Subsidiary, becomes a Joint Venture Subsidiary or (z) a Borrower) for fair market value, with at least 75% of the consideration received for all such Asset Sales payable in cash upon such sale (provided, however, that for the purposes of this clause (s), the following shall be deemed to be cash: (i) any liabilities (as shown on the applicable Borrower's most recent balance sheet provided hereunder or in the footnotes thereto) of the applicable Borrower or applicable Restricted Subsidiary, other than liabilities that are by their terms subordinated to the payment in cash of the Obligations, that are assumed by the transferee with respect to the applicable Asset Sale and for which Holdings, such Borrower and all of its Restricted Subsidiaries shall have been validly released by all applicable creditors in writing, (ii) any securities received by the applicable Borrower or the applicable Restricted Subsidiary from such transferee that are converted by such Borrower or such Restricted Subsidiary into cash (to the extent of the cash received) within 180 days following the closing of the applicable Asset Sale, and (iii) aggregate non-cash consideration received by the applicable Borrower or the applicable Restricted Subsidiary having an aggregate fair market value (determined as of the closing of the applicable Asset Sale for which such non-cash consideration is received) not to exceed \$50,000,000 at any time (net of any non-cash consideration converted into cash)); provided however, that, in the case of a sale of Equity Interests of a Borrowing Base Guarantor or Receivables Seller, the Administrative Borrower shall deliver an updated Borrowing Base Certificate at the time of, and giving effect to, such sale, and shall make such mandatory prepayments as may be required (including pursuant to Section 2.10(b)(ix) and (xi), as applicable) in connection therewith;

(t) any sale, lease transfer or other disposition in connection with any industrial revenue bond or similar program that does not result in the recognition of the sale or the asset transfer in accordance with GAAP, or any similar transaction;

(u) the Ulsan Share Sale; ~~and~~

(v) the NKL Share Repurchase; ~~;~~

(w) any Permitted Aleris Foreign Subsidiary Transfer; and

(x) to the extent constituting an Asset Sale, the Permitted Reorganization; provided that the terms and conditions set forth in the definition of Permitted Reorganization and, to the extent applicable, the definition of Permitted Reorganization Actions shall have been satisfied; provided, further, that all such Asset Sales involving (whether as consideration or otherwise) a loan or advance, or that otherwise involves an Intercompany Note, shall be permitted solely to the extent that such loan or advance is documented as an Intercompany Note, and all Intercompany Notes in connection therewith shall be subordinated to the Secured Obligations on terms reasonably satisfactory to the Administrative Agent, and shall be pledged as Collateral pursuant to the Security Documents.

SECTION 6.07 Cash Pooling Arrangements.

Amend, vary or waive any term of the Cash Pooling Arrangements without express written consent of the Administrative Agent, or enter into any new Cash Pooling Arrangements, new pooled account, notional cash pooling or netting agreement with any Affiliate without express written consent of the Administrative Agent. Permit the aggregate amount owed pursuant to the Cash Pooling Arrangements by all Companies who are not Loan Parties minus the aggregate amount on deposit pursuant to the Cash Pooling Arrangements from such Persons to exceed €75,000,000.

SECTION 6.08 Dividends. Declare or pay, directly or indirectly, any Dividends with respect to any Company, except that the following shall be permitted:

(a) (i) Dividends by any Company to any Loan Party that is a Wholly Owned Subsidiary of Holdings (or the ~~Parent~~Canadian Borrower or a Wholly Owned Subsidiary of the ~~Parent~~Canadian Borrower following a Qualified ~~Parent~~Canadian Borrower IPO), (ii) Dividends by Holdings (or the ~~Parent~~Canadian Borrower following a Qualified ~~Parent~~Canadian Borrower IPO) payable solely in Qualified Capital Stock and (iii) Dividends by Holdings payable with the proceeds of Permitted Holdings Indebtedness;

(b) (i) Dividends by any Company that is not a Loan Party to any other Company that is not a Loan Party but is a Wholly Owned Subsidiary of Holdings (or the ~~Parent~~Canadian Borrower or a Wholly Owned Subsidiary of the ~~Parent~~Canadian Borrower following a Qualified ~~Parent~~Canadian Borrower IPO) and (ii) cash Dividends by any Company that is not a Loan Party to the holders of its Equity Interests on a pro rata basis;

(c) (A) to the extent actually used by Holdings to pay such franchise taxes, costs and expenses, fees, payments by the ~~Parent Borrower~~Designated Company to or on behalf of Holdings in an amount sufficient to pay franchise taxes and other fees solely required to maintain the legal existence of Holdings, (B) payments by the ~~Parent Borrower~~Designated Company to or on behalf of Holdings in an amount sufficient to pay out-of-pocket legal, accounting and filing costs and other expenses in the nature of overhead in the ordinary course of business of Holdings, and (C) management, consulting, monitoring and advisory fees and related expenses and termination fees pursuant to a management agreement with one or more Specified Holders relating to the ~~Parent Borrower~~Designated Company (collectively, the "Management Fees"), in the case of clauses (A), (B) and (C) in an aggregate amount not to exceed in any calendar year the greater of (i) \$20,000,000 and (ii) 1.5% of the ~~Parent Borrower's~~Designated Company's Consolidated EBITDA (Leverage) in the prior calendar year;

(d) ~~Parent Borrower~~the Designated Company may pay cash Dividends to the holders of its Equity Interests and, if Holdings is a holder of such Equity Interests, the proceeds thereof may be utilized by Holdings to pay cash Dividends to the holders of its

Equity Interests; provided that the Dividends described in this clause (d) shall not be permitted if the Availability Conditions are not satisfied on the date of payment thereof;

- (e) ~~to the extent constituting an Asset Sale, transfers permitted by Section 6.09(n)~~[reserved];
- (f) to the extent constituting a Dividend, payments permitted by Section 6.09(d) that do not relate to Equity Interests;
- (g) Dividends by any Company to any other Company that are part of a Series of Cash Neutral Transactions; provided no Default has occurred and is continuing;

(h) following a Qualified IPO, Dividends ~~by the Parent Borrower~~ paid to Holdings (which may pay the proceeds thereof to the holders of its Equity Interests) or, in the case of a Qualified ~~Parent~~Canadian Borrower IPO, its other equity holders, of up to 6% of the net cash proceeds received by (or contributed to the capital of) the ~~Parent Borrower~~Designated Company in or from such Qualified IPO in any fiscal year; and

(i) Dividends to repurchase Equity Interests of Holdings (or, on and after the Designated Holdco Effective Date, Designated Holdco) or any direct or indirect parent entity (or following a Qualified ~~Parent~~Canadian Borrower IPO, Equity Interests of the ~~Parent~~Canadian Borrower) from current or former officers, directors or employees of the ~~Parent Borrower~~Designated Company or any of its Restricted Subsidiaries or any direct or indirect parent entity (or permitted transferees of such current or former officers, directors or employees); provided, however, that the aggregate amount of such repurchases shall not exceed (i) \$10,000,000 in any calendar year prior to completion of a Qualified IPO, or (ii) \$15,000,000 in any calendar year following completion of a Qualified IPO (with unused amounts in any calendar year being permitted to be carried over for the next two succeeding calendar years up to a maximum of (A) \$20,000,000 in the aggregate in any calendar year prior to completion of a Qualified IPO, or (B) \$30,000,000 in the aggregate in any calendar year following completion of a Qualified IPO).

SECTION 6.09 Transactions with Affiliates. Enter into, directly or indirectly, any transaction or series of related transactions, whether or not in the ordinary course of business, with or for the benefit of any Affiliate of any Company (other than between or among Loan Parties), other than on terms and conditions at least as favorable to such Company as would reasonably be obtained by such Company at that time in a comparable arm's-length transaction with a person other than an Affiliate, except that the following shall be permitted:

- (a) Dividends permitted by Section 6.08;
- (b) Investments permitted by Section 6.04(d), (e), (h), (i), (l), (p) or (s) and other Investments permitted under Section 6.04 in Restricted Subsidiaries and joint ventures; provided that any such joint venture is not owned by any Affiliate of Holdings except through the ownership of the Companies;
- (c) mergers, amalgamations and consolidations permitted by Section 6.05(c), (d), (e), (f) or (g), and Asset Sales permitted by Section 6.06(h)(iv) and (v) or (m);
- (d) reasonable and customary director, officer and employee compensation (including bonuses) and other benefits (including retirement, health, stock option and other benefit plans) and indemnification arrangements, in each case approved by the Board of Directors of the ~~Parent Borrower~~Designated Company;
- (e) transactions with customers, clients, suppliers, joint venture partners or purchasers or sellers of goods and services, in each case in the ordinary course of business on terms not materially less favorable as might reasonably have been obtained at such time from a Person that is not an Affiliate of the ~~Parent Borrower~~Designated Company, as determined in good faith by the ~~Parent Borrower~~Designated Company, and otherwise not prohibited by the Loan Documents;
- (f) the existence of, and the performance by any Company of its obligations under the terms of, any limited liability company, limited partnership or other Organizational Document or securityholders agreement (including any registration rights agreement or purchase agreement related thereto) to which it is a party on the ~~Closing~~Amendment No. 2 Effective Date and which has been disclosed in writing to the Administrative Agent as in effect on the ~~Closing~~Amendment No. 2 Effective Date; and similar agreements that it may enter into thereafter, to the extent not more adverse to the interests of the Lenders in any material respect, when taken as a whole, than any of such documents and agreements as in effect on the ~~Closing~~Amendment No. 2 Effective Date;
- (g) the Transactions as contemplated by the Transaction Documents;
- (h) Qualified Securitization Transactions permitted under Section 6.01(e) and transactions in connection therewith on a basis no less favorable to the applicable Company as would be obtained in a comparable arm's length transaction with a person not an Affiliate thereof;
- (i) cash management netting and pooled account arrangements permitted under Section 6.01(r);
- (j) transactions between or among any Companies that are not Loan Parties;

(k) transactions pursuant to a management agreement with the Specified Holders so long as the aggregate payment of Management Fees thereunder are permitted under Section 6.08(c);

(l) transactions between Loan Parties and Companies that are not Loan Parties that are at least as favorable to each such Loan Party as would reasonably be obtained by such Loan Party in a comparable arm's-length transaction with a person other than an Affiliate; and

(m) transactions contemplated by a Receivables Purchase Agreement; ~~and~~

~~(n) to the extent permitted by the Term Loan Documents (and any Permitted Term Loan Facility Refinancings), transfers of 100% of the Equity Interests held by Subsidiaries of Holdings in (i) any Subsidiary that is not a Loan Party or (ii) any foreign Subsidiary Guarantor (that is not organized in a Principal Jurisdiction), in each case to a U.S. Borrower pursuant to a corporate reorganization plan that is reasonably acceptable to the Administrative Agent; provided that (A) to the extent permitted by the Term Loan Documents (and any Permitted Term Loan Facility Refinancings of any of such Indebtedness), any security interests granted to the Collateral Agent for the benefit of any Secured Parties pursuant to the relevant Security Documents in the Equity Interests so transferred shall be replaced by security interests granted to the Collateral Agent for the benefit of the relevant Secured Parties pursuant to the relevant Security Documents in such portion of the Equity Interests of such transferred Subsidiary as is required by the Term Loan Documents (and any Permitted Term Loan Facility Refinancings), which new security interests shall be in full force and effect and perfected and enforceable (to at least the same extent as the security interests in such transferred Subsidiary in effect immediately prior to such transfer, except that a percentage of such equity interest lower than 100% may be pledged to the extent permitted by the Term Loan Documents (and any Permitted Term Loan Facility Refinancings)), (B) such transaction is permitted pursuant to the Term Loan Documents (and any Permitted Term Loan Facility Refinancings) and (C) no Default is then continuing or would result therefrom;~~

provided that notwithstanding any of the foregoing or any other provision of this Agreement, all intercompany loans, advances or other extensions of credit made to or by Companies organized in Switzerland or Germany shall be on fair market terms.

SECTION 6.10 Minimum Consolidated Fixed Charge Coverage Ratio. At any time after the occurrence of a Covenant Trigger Event and prior to the subsequent occurrence of a Covenant Recovery Event, permit the Consolidated Fixed Charge Coverage Ratio, for the most recent Test Period ending upon or immediately prior to such Covenant Trigger Event for which financial statements have been delivered under Section 5.01(a) or (b) (or if a Default has occurred under Section 5.01(a) or (b), are required to have been delivered under Section 5.01(a) or (b)), and any Test Period ending thereafter and prior to the subsequent occurrence of a Covenant Recovery Event, to be less than 1.25 to 1.0.

SECTION 6.11 Prepayments of Other Indebtedness; Modifications of Organizational Documents and Other Documents, etc. Directly or indirectly:

(a) (i) make any voluntary or optional payment of principal on or prepayment on or redemption or acquisition for value of, or complete any mandatory prepayment, redemption or purchase offer in respect of, or otherwise voluntarily or optionally defease or segregate funds with respect to, any Indebtedness incurred under Sections 6.01(l) or (to the extent

constituting Junior Secured ~~Indebtedness~~Indebtedness or Other Secured Indebtedness) (y), Permitted Second Priority Refinancing Debt and Permitted Unsecured Refinancing Debt or any Indebtedness under the ~~New~~ Senior Note Documents or any Subordinated Indebtedness or any Permitted Refinancings of any of such Indebtedness, except any such Indebtedness may be prepaid or redeemed (y) with the proceeds of a Permitted Refinancing or (z) if the Availability Conditions are satisfied at the time thereof;

(ii) make any payment on or with respect to any Subordinated Indebtedness wholly among Loan Parties in violation of the subordination provisions thereof; or

(iii) make any payment (whether, voluntary, mandatory, scheduled or otherwise) on or with respect to any Subordinated Indebtedness (including payments of principal and interest thereon, ~~but excluding the discharge by Novelis AG (as consideration for the purchase of Accounts under the Receivables Purchase Agreements) of loans or advances made by Novelis AG to German Seller or any Swiss Seller~~), if an Event of Default is continuing or would result therefrom;

(b) (i) with respect to any Term Loans under the Term Loan Documents (or any Permitted Term Loan Facility Refinancings of any of such Indebtedness), unless the Availability Conditions are satisfied, make any voluntary or optional payment of principal on or voluntary prepayment on or voluntary acquisition for value of Indebtedness under the Term Loan Documents or the documents related to such Permitted Term Loan Facility Refinancing (except pursuant to a Permitted Term Loan Facility Refinancing); (ii) except with respect to Indebtedness incurred under Section 6.01(l) (it being understood that such Indebtedness shall be subject to the terms of clause (a) above), with respect to any Additional Senior Secured Indebtedness (or any Permitted Refinancings of any of such Indebtedness), unless the Availability Conditions are satisfied, make any voluntary or optional payment of principal on or voluntary prepayment on or voluntary acquisition for value of, or otherwise voluntarily or optionally defease or segregate funds with respect to, Indebtedness under the Additional Senior Secured Indebtedness Documents applicable thereto (except pursuant to a Permitted Refinancings of any of such Indebtedness), or (iii) notwithstanding anything to the contrary in clause (a) above (1) unless the Availability Conditions are

satisfied or (2) except pursuant to a Permitted Refinancing thereof that otherwise constitutes permitted Indebtedness under Section 6.01, directly or indirectly make any payment (whether, voluntary, mandatory, scheduled or otherwise) of principal on, or otherwise voluntarily or optionally defease or segregate funds with respect to, Permitted Short Term Indebtedness or any Permitted Refinancing of (x) Permitted Short Term Indebtedness or (y) any Permitted Refinancing of Permitted Short Term Indebtedness, in the case of clauses (x) and (y), that otherwise constitutes permitted Indebtedness under Section 6.01 (such Permitted Refinancing Indebtedness under clauses (x) and (y), the “Permitted Short Term Refinancing Indebtedness”);

(c) amend or modify, or permit the amendment or modification of, any provision of any document governing any Material Indebtedness (other than Indebtedness under the Loan Documents, the Permitted Short Term Loan Documents, or Term Loan Documents (or any Permitted Term Loan Facility Refinancings thereof)) in any manner that, taken as a whole, is adverse in any material respect to the interests of the Lenders;

(d) amend or modify, or permit the amendment or modification of, any provision of any document governing any Indebtedness under the Term Loan Documents (or any Permitted Term Loan Facility Refinancings thereof) or under the Permitted Short Term Loan Documents if such amendment or modification would (i) cause such Indebtedness to have a final maturity date earlier than the final maturity date of, or have a Weighted Average Life to Maturity shorter than the Weighted Average Life to Maturity of, such Indebtedness immediately prior to such amendment or modification (excluding the effects of nominal amortization in the amount of no greater than one percent per annum and prepayments of Indebtedness), ~~or~~ (ii) result in the persons that are (or are required to be) obligors under such Indebtedness to be different from the persons that are (or are required to be) obligors under such Indebtedness being so amended or modified (unless such persons required to be obligors under such Indebtedness are or are required to be or become obligors under the Loan Documents), or (iii) in the case of the Permitted Short Term Loan Documents, cause the aggregate principal amount (or accreted value, if applicable) of Indebtedness thereunder to be increased, or otherwise amend, modify or permit the amendment or modification of any such documents in any manner that, taken as a whole, is adverse in any material respect to the interests of the Lenders; and provided that prior to the effectiveness of such amendment or modification, a Responsible Officer of the Administrative Borrower shall have delivered an Officer’s Certificate to the Administrative Agent (together with a reasonably detailed description of the material terms and conditions of such amendment or modification or drafts of the documentation relating thereto) certifying that the Administrative Borrower has determined in good faith that such terms and conditions satisfy the foregoing requirements;

(e) terminate, amend or modify any of its Organizational Documents (including (x) by the filing or modification of any certificate of designation and (y) any election to treat any Pledged Securities (as defined in the Security Agreement) as a “security” under Section 8103 of the UCC other than (subject to the Intercreditor Agreement) concurrently with the delivery of certificates representing such Pledged Securities to the Collateral Agent) or any agreement to which it is a party with respect to its Equity Interests (including any stockholders’ agreement), or enter into any new agreement with respect to its Equity Interests, other than any such amendments or modifications or such new agreements which are not adverse in any material respect to the interests of the Lenders; or

(f) amend or modify, or grant any consents, waivers or approvals with respect to, or permit the amendment or modification of, or granting of any consents, waivers or approvals with respect to, a Receivables Purchase Agreement, without the consent of the Administrative Agent (not to be unreasonably withheld).

For the avoidance of doubt, any amendment or modification of any document governing any Indebtedness described in clause (c) or (d) above that results in (x) an increase in the rates of interest under such Indebtedness to rates that, in the good faith judgment of the Borrowers, are then-current market rates for such type of Indebtedness, or (y) fees that, in the good faith judgment of the Borrowers, are then-current market fees in connection with any extension of maturity or increase in commitments and/or Indebtedness thereunder that would constitute permitted Indebtedness under Section 6.01 (or any Permitted Refinancing thereof), including any upfront, commitment or arrangement fees in connection therewith, in the case of clauses (x) and (y), shall not be deemed materially adverse to the Lenders, in each case, solely as a result of such increase or the incurrence or payment of any such fee.

SECTION 6.12 Limitation on Certain Restrictions on Restricted Subsidiaries. Directly or indirectly, create or otherwise cause or suffer to exist or become effective any encumbrance or restriction on the ability of any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company to (a) pay dividends or make any other distributions on its Equity Interests or any other interest or participation in its profits owned by the ~~Parent Borrower~~Designated Company, or any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company, or pay any Indebtedness owed to the ~~Parent Borrower~~Designated Company or a Restricted Subsidiary of the ~~Parent Borrower~~Designated Company, (b) make loans or advances to the ~~Parent Borrower~~Designated Company, or any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company, or (c) transfer any of its properties to the ~~Parent Borrower~~Designated Company, or any Restricted Subsidiary of the ~~Parent Borrower~~Designated Company, except for such encumbrances or restrictions existing under or by reason of (i) Applicable Law; (ii) this Agreement and the other Loan Documents; (iii) any agreement or instrument evidencing or governing any Indebtedness permitted pursuant to Sections 6.01(b), (e), (l), (m), (q), (t), (u), (v), (w), (y) or, (cc) or (dd), in each case to the extent, in the good faith judgment of the ~~Borrowers~~Designated Company, such restrictions and conditions are on customary market terms for Indebtedness of such type and so long as the ~~Borrowers have~~Designated Company has determined in good faith that such restrictions would not reasonably be expected to impair in any material respect the ability of the Loan Parties to meet their obligations under the Loan Documents; (iv) customary provisions restricting subletting or assignment of any lease governing a leasehold interest of a Company; (v) customary provisions restricting assignment of any agreement entered into by a Restricted Subsidiary of the

~~Parent Borrower~~ Designated Company; (vi) any holder of a Lien permitted by Section 6.02 restricting the transfer of the property subject thereto; (vii) customary restrictions and conditions contained in any agreement relating to the sale of any property permitted under Section 6.06 pending the consummation of such sale; (viii) any agreement in effect at the time such Restricted Subsidiary of the ~~Parent Borrower~~ Designated Company becomes a Restricted Subsidiary of the ~~Parent Borrower~~ Designated Company, so long as such agreement was not entered into in connection with or in contemplation of such person becoming a Restricted Subsidiary of the ~~Parent~~ Borrower Designated Company; (ix) without affecting the Loan Parties' obligations under Section 5.11, customary provisions in partnership agreements, shareholders' agreements, joint venture agreements, limited liability company organizational governance documents and other Organizational Documents, entered into in the ordinary course of business (or in connection with the formation of such partnership, joint venture, limited liability company or similar person) that (A) restrict the transfer of Equity Interests in such partnership, joint venture, limited liability company or similar person or (B) the case of any Joint Venture or Joint Venture Subsidiary that is not a Loan Party, provide for other restrictions of the type described in clauses (a), (b) and (c) above, solely with respect to the Equity Interests in, or property held in, such joint venture, and customary provisions in asset sale and stock sale agreements and other similar agreements permitted hereunder that provide for restrictions of the type described in clauses (a), (b) and (c) above, solely with respect to the assets or persons subject to such sale agreements; (x) restrictions on cash or other deposits or net worth imposed by suppliers or landlords under contracts entered into in the ordinary course of business; (xi) any instrument governing Indebtedness assumed in connection with any Permitted Acquisition or other Acquisition permitted pursuant to Section 6.04, which encumbrance or restriction is not applicable to any person, or the properties or assets of any person, other than the person or the properties or assets of the person so acquired; (xii) any encumbrances or restrictions imposed by any amendments or refinancings that are otherwise not prohibited by the Loan Documents of the contracts, instruments or obligations referred to in clauses (iii), (viii) or (xi) above; provided that such amendments or refinancings are no more materially restrictive with respect to such encumbrances and restrictions than those prior to such amendment or refinancing; (xiii) any restrictions on transfer of the Equity Interests in NKL or its direct parents, 4260848 Canada Inc., 4260856 Canada Inc., and 8018227 Canada Inc., imposed by any lock-up or listing agreement, rule or regulation in connection with any listing or offering of Equity Interests in NKL to the extent required by Applicable Law or listing or stock exchange requirements; or (xiv) customary credit event upon merger provisions in Hedging Agreements.

SECTION 6.13 Issuance of Disqualified Capital Stock. Issue any Disqualified Capital Stock except (i) Joint Venture Subsidiaries and Excluded Collateral Subsidiaries may issue Disqualified Capital Stock pursuant to Section 6.06(l) and (ii) issuances of Disqualified Capital Stock under Section 6.04(i) shall be permitted.

SECTION 6.14 ~~Parent Borrower~~ Chief Executive Offices. Allow the Chief Executive Office of ~~Parent Borrower~~ any Subsidiary of Holdings organized under the laws of the United States, any state thereof or the District of Columbia to be located outside of the United States.

SECTION 6.15 Business.

(a) Each of Holdings; and Novelis Europe Holdings Limited ~~and Eurofoil~~ shall not engage in any business or activity other than (i) holding ~~shares in~~ the Equity Interests of its Subsidiaries (which, in the case of Holdings, shall be limited to (x) the Parent Borrower), ~~(ii) holding intercompany loans made to the Parent Borrower, (iii) Designated Company and (y) solely to the extent that the transaction described in clause (c) of the definition of Permitted Reorganization Actions is consummated in accordance with the terms of this~~

Agreement, no more than 12.5% of the aggregate amount of Equity Interests issued by Novelis Aluminium Holdings Unlimited plus one additional share of such Equity Interests), (ii) making intercompany loans to (w) in the case of Novelis Europe Holdings Limited, pursuant to a transaction permitted under Section 6.04(i), (x) the Canadian Borrower, (y) on and after the Designated Holdco Effective Date, Designated Holdco or (z) any of its Subsidiaries to the extent made pursuant to any transaction consummated in accordance with the definition of Permitted Aleris Foreign Subsidiary Transfer, (iii) borrowing intercompany loans from a Company (x) in the case of AV Minerals, pursuant to a transaction permitted under clause (c) of the definition of Permitted Reorganization Actions and (y) in the case of Novelis Europe Holdings Limited, pursuant to a transaction permitted under Section 6.01(d) or clause (h) of the definition of Permitted Reorganization Actions, (iv) other activities attributable to or ancillary to its role as a holding company for its Subsidiaries, and (iv) compliance with its obligations under the Loan Documents, the Term Loan Documents (and any Permitted Refinancings thereof), and the Senior Note Documents (and any Permitted

Refinancings thereof), the Permitted Short Term Loan Documents, the Additional Senior Secured Indebtedness Documents, Junior Secured Indebtedness, Other Secured Indebtedness and documents relating to Permitted First Priority Refinancing Indebtedness, Permitted Second Priority Refinancing Indebtedness, Permitted Unsecured Refinancing Indebtedness and Indebtedness under Section 6.01(l), and (vi) issuing its Equity Interests pursuant to transactions that (x) do not violate any requirement of Applicable Law or its Organizational Documents, (y) do not result in a Change of Control, and (z) are not otherwise prohibited by this Agreement.

(b) The ~~Parent Borrower~~ Designated Company and its Restricted Subsidiaries will not engage (directly or indirectly) in any business other than those businesses in which ~~Parent Borrower~~ the Designated Company and its Restricted Subsidiaries are engaged on the ~~Closing Amendment No. 2 Effective~~ Date as described in the Confidential Information Memorandum (or, in the good faith judgment of the Board of Directors, which are substantially related thereto or are reasonable extensions thereof).

(c) The ~~Parent Borrower~~ Designated Company will not permit any Securitization Entity that it directly or indirectly controls to engage in any business or activity other than performing its obligations under the related Qualified Securitization Transaction and will not permit any Securitization Entity that it directly or indirectly controls to hold any assets other than the Securitization Assets.

(d) No Loan Party (to the extent such Loan Party is subject to the Regulation) will have a centre of main interest for the purposes of the Regulation other than as situated in its jurisdiction of incorporation, except as set forth in clause (ii) of Section 3.27.

SECTION 6.16 Limitation on Accounting Changes. Make or permit any change in accounting policies or reporting practices or tax reporting treatment, except changes that are permitted by GAAP or any requirement of Applicable Law and disclosed to the Administrative Agent and changes described in Section 1.04.

SECTION 6.17 Fiscal Year. Change its fiscal year-end to a date other than March 31; provided that, upon at least 30 Business Days' prior written notice to the Administrative Agent (or such shorter period as may be determined by the Administrative Agent in its sole discretion), each of Holdings and its Subsidiaries shall be permitted to change its fiscal year-end to December 31 at any time on or after the date that Hindalco changes its fiscal year-end to December 31, in which case the Loan Parties and the Administrative Agent will, and are hereby authorized by the other Agents, the Lenders and the Issuing Banks to, make any adjustments to this Agreement and the other Loan Documents that are reasonably requested by the Administrative Agent or are necessary to reflect such change in fiscal year-end.

SECTION 6.18 Margin Rules. Use the proceeds of any Loans or any drawings under a Letter of Credit, whether directly or indirectly, and whether immediately, incidentally or ultimately, to purchase or carry margin stock (within the meaning of Regulation U) or to extend credit to others for the purpose of purchasing or carrying margin stock or to refund indebtedness originally incurred for such purpose.

SECTION 6.19 No Further Negative Pledge. Enter into or suffer to exist any consensual agreement, instrument, deed or lease which prohibits or limits the ability of any Loan Party to create, incur, assume or suffer to exist any Lien upon any of their respective properties or revenues, whether now owned or hereafter acquired, to secure the Secured Obligations, or which requires the grant of any security for an obligation if security is granted to secure the Secured Obligations, except the following: (1) this Agreement and the other Loan Documents; (2) covenants in documents creating Liens permitted by Section 6.02 prohibiting further Liens on the properties encumbered thereby; (3) the Term Loan Documents, (4) the Additional Senior Secured Indebtedness Documents, and documents relating to any Permitted First Priority Refinancing Debt, Permitted Second Priority Refinancing Debt, Junior Secured Indebtedness and Other Secured Indebtedness (so long as such documents permit Liens to secure the Secured Obligations); (5) Standard Factoring Undertakings and Standard Securitization Undertakings in connection with transactions otherwise permitted hereunder and (6) any prohibition or limitation that (a) exists pursuant to Applicable Law, (b) consists of customary restrictions and conditions contained in any agreement relating to the sale of any property permitted under Section 6.06 pending the consummation of such sale, (c) restricts subletting or assignment of any lease governing a leasehold interest of a Loan Party or a Subsidiary, or restricts assignment, pursuant to customary provisions, of any other agreement entered into in the ordinary course of business, (d) is permitted under Section 6.02(s), (e) exists in any agreement or other instrument of a person acquired in an Investment permitted hereunder in existence at the time of such Investment (but not created in connection therewith or in contemplation thereof), which prohibition or limitation is not applicable to any person, or the properties or assets of any person, other than the person, or the property or assets of the person so acquired; and provided that no such person shall be a Borrowing Base Guarantor, and no properties of any such person shall be included in the Borrowing Base, to the extent such prohibition or limitation is applicable to the Liens under the Security Documents or requires the grant or creation of a Lien on any of the Revolving Credit Priority Collateral, (f) is contained in any joint venture, shareholders agreement, limited liability operating agreement or other Organizational Document governing a Joint Venture or Joint Venture Subsidiary which limits the ability of an owner of an interest in a Joint Venture or Joint Venture Subsidiary from encumbering its ownership interest therein or (g) is imposed by any amendments or refinancings that are otherwise permitted by the Loan Documents of the contracts, instruments or obligations referred to in clause (3), (4) ~~or~~ (5) or (6)(e); provided that such amendments and refinancings are no more materially restrictive with respect to such prohibitions and limitations than those prior to such amendment or refinancing.

SECTION 6.20 Compliance with Anti-Money Laundering Laws and Anti-Corruption

Law. Each Credit Party, its Restricted Subsidiaries and their respective Related Parties shall:

(a) comply in all material respects with all applicable Anti-Money Laundering Laws and Anti-Corruption Laws, and shall maintain policies and procedures reasonably designed to ensure compliance with the Anti-Money Laundering Laws and Anti-Corruption Laws, (b) ensure it does not use, directly or indirectly, any part of the proceeds of the Loans or any Letter of Credit in violation of any Anti-Corruption Laws or Anti-Money Laundering Law, and (c) ensure it does not fund any repayment of any Loan or LC Obligation in violation of any Anti-Corruption Laws or Anti-Money Laundering Laws. Each Credit Party shall, upon the request of the Administrative Agent from time to time, provide certification and other reasonably requested evidence of such Credit Party's compliance with this section.

SECTION 6.21 Compliance with Sanctions No Credit Party and none of its Restricted Subsidiaries or, to each Credit Party's knowledge, their respective Related Parties will, directly or indirectly, use the proceeds of any Loan or any drawing under any Letter of Credit, or lend, contribute, or otherwise make available such proceeds to any subsidiary, joint venture partner, or other Person (i) to fund any activities or business of or with a Sanctioned Person in any manner violative of any Sanctions, or (ii) in any manner that would be prohibited by Sanctions or, to the knowledge of any Credit Party, would otherwise cause the Lender to be in breach of any Sanctions. Each Credit Party shall comply with Sanctions and shall maintain policies and procedures reasonably designed to ensure compliance with Sanctions.

~~**SECTION 6.22 Forward Share Sale Agreement and Support Agreement.** With respect to the Parent Borrower, assign, transfer, convey, sell or otherwise dispose of any of its right, title or interest in any of the Forward Share Sale Agreement or the Support Agreement, except that such agreements may be cancelled or terminated.~~

SECTION 6.22 Bank Products; Bank Product Debt. ~~Notwithstanding anything herein or in any other Loan Document to the contrary, prior to the date that the Intercreditor Agreement is amended, restated, supplemented or otherwise modified in accordance with the authorization granted by the Lenders in Section 3(a)(v) of Amendment No. 2 and on terms satisfactory to the Administrative Agent and the Collateral Agent, no Company shall incur Bank Product Debt or obtain or otherwise enter into any agreements in respect of Bank Products (i) that are extended to a Person that owns all or any portion of the Equity Interests of AV Metals or, on or after the Permitted Holdings Amalgamation, Novelis Inc., unless~~

Novelis Inc. or any of its Subsidiaries that is a Loan Party is also an obligor jointly and severally liable in respect of all such Bank Products and Bank Product Debt of such Person or (ii) that do not otherwise constitute Bank Products or Bank Product Debt under the Intercreditor Agreement. All Bank Products entered into, and Bank Product Debt incurred, in each case in violation of this Section 6.22 shall constitute “Excluded Bank Products” and “Excluded Bank Product Debt” respectively.

SECTION 6.23 Canadian Defined Benefit Plans. Not (i) maintain, sponsor, administer, contribute to or participate in any Canadian Defined Benefit Plan other than the Canadian Defined Benefit Plans identified in Schedule 3.17 to Amendment No. 2 or Canadian Defined Benefit Plans acquired pursuant to an acquisition, or (ii) acquire assets or Equity Interest if as a result of the acquisition the Borrowers or Guarantors may have any liability in respect of a Canadian Defined Benefit Plan that has a deficiency on a wind-up basis at the time of acquisition except where such liability would not reasonably be expected to have a Material Adverse Effect.

ARTICLE VII

GUARANTEE

SECTION 7.01 The Guarantee. The Guarantors hereby jointly and severally guarantee, as a primary obligor and not as a surety to each Secured Party and their respective successors and permitted assigns, the prompt payment in full when due (whether at stated maturity, by required prepayment, declaration, demand, by acceleration or otherwise) of the principal of and interest (including any interest, fees, costs or charges accruing after the commencement of an Insolvency Proceeding, whether or not allowed (or which would have accrued, but for the commencement of such an Insolvency Proceeding)) on the Loans made by the Lenders to, and the Notes held by each Lender of, each Borrower, and all other Secured Obligations from time to time owing to the Secured Parties by any Loan Party under any Loan Document or Bank Product Agreement entered into with a counterparty that is a Secured Party, and the performance of all obligations under any of the foregoing, in each case strictly in accordance with the terms thereof (such obligations being herein collectively called the **“Guaranteed Obligations”**); provided that, anything to the contrary contained in the foregoing notwithstanding, Guaranteed Obligations shall exclude any Excluded Swap Obligations. In addition to the guarantee contained herein, each Guarantor that is a Foreign Subsidiary, as well as Holdings, shall execute a Guarantee governed by the Applicable Law of such Person’s jurisdiction of organization (each such Guarantee, a **“Foreign Guarantee”**) and to the extent that the provisions of this ARTICLE VII shall duplicate or conflict with the provisions thereof, the terms of the Foreign Guarantees shall govern the obligations of such Guarantors. The Guarantors hereby jointly and severally agree that if Borrower(s) or other Guarantor(s) shall fail to pay in full when due (whether at stated maturity, by acceleration or otherwise) any of the Guaranteed Obligations, the Guarantors will promptly pay the same in cash, without any demand or notice whatsoever as if it was the principal obligor, and that in the case of any extension of time of payment or renewal of any of the Guaranteed Obligations, the same will be promptly paid in full when due (whether at extended maturity, by acceleration or otherwise) in accordance with the terms of such extension or renewal. Without prejudice to the generality of Section 7.01 and Section 7.02, each Guarantor expressly confirms that it intends that this guarantee shall extend from time to time to any (however fundamental and of whatsoever nature and whether or not more onerous) variation, increase, extension or addition of or to any of the Loan Documents and/or any facility or amount made available under any of the Loan Documents for the purposes of or in connection with any of the following: acquisitions of any nature; increasing working capital; enabling investor distributions or Dividends to be made; carrying out restructurings; refinancing existing facilities; refinancing any other indebtedness; making facilities available to new borrowers; any other variation or extension of the purposes for which any such facility or amount might be made available from time to time; and any fees, costs and/or expenses associated with any of the foregoing.

SECTION 7.02 Obligations Unconditional. The obligations of the Guarantors under Section 7.01 shall constitute a guaranty of payment and not of collection and to the fullest extent permitted by Applicable Law, are absolute, irrevocable and unconditional, joint and several, irrespective of the value, genuineness, validity, regularity or enforceability of the Guaranteed Obligations of Borrowers or any other Loan Party under this Agreement, the Notes, if any, or any other agreement or instrument referred to herein or therein, or any substitution, release or exchange of any other guarantee or security for any of the Guaranteed Obligations, and, irrespective of any other circumstance whatsoever that might otherwise constitute a legal or equitable discharge or defense of a surety or Guarantor (except for payment in full). Without limiting the generality of the foregoing, it is agreed that the occurrence of any one or more of the following shall not alter or impair the liability of the Guarantors hereunder which shall remain absolute, irrevocable and unconditional under any and all circumstances as described above:

(i) at any time or from time to time, without notice to the Guarantors, the time for any performance of or compliance with any of the Guaranteed Obligations shall be extended, or such performance or compliance shall be waived or the Maturity Date shall be extended with respect to all or a portion of the Guaranteed Obligations;

(ii) any of the acts mentioned in any of the provisions of this Agreement or the Notes, if any, or any other agreement or instrument referred to herein or therein shall be done or omitted;

(iii) the maturity of any of the Guaranteed Obligations shall be accelerated, or any of the Guaranteed Obligations shall be amended in any respect, or any right under the Loan Documents or any other agreement or instrument referred to herein or therein shall be amended or waived in any respect or any other guarantee of any of the Guaranteed Obligations or any security therefor shall be released or exchanged in whole or in part or otherwise dealt with;

(iv) any Lien or security interest granted to, or in favor of, any Issuing Bank, Lender or Agent as security for any of the Guaranteed Obligations shall fail to be perfected; or

(v) the release of any other Guarantor pursuant to Section 7.09.

The Guarantors hereby expressly waive diligence, presentment, demand of payment, protest and all notices whatsoever, and any requirement that any Secured Party exhaust any right, power or remedy or proceed against any Borrower or any other Loan Party under this Agreement or the Notes, if any, or any other agreement or instrument referred to herein or therein, or against any other person under any other guarantee of, or security for, any of the Guaranteed Obligations. The Guarantors waive any and all notice of the creation, renewal, extension, waiver, termination or accrual of any of the Guaranteed Obligations and notice of or proof of reliance by any Secured Party upon this Guarantee or acceptance of this Guarantee, and the Guaranteed Obligations, and any of them, shall conclusively be deemed to have been created, contracted or incurred in reliance upon this Guarantee, and all dealings between Borrowers and the Secured Parties shall likewise be conclusively presumed to have been had or consummated in reliance upon this Guarantee. This Guarantee shall be construed as a continuing, absolute, irrevocable and unconditional guarantee of payment without regard to any right of offset with respect to the Guaranteed Obligations at any time or from time to time held by Secured Parties, and the obligations and liabilities of the Guarantors hereunder shall not be conditioned or contingent upon the pursuit by the Secured Parties or any other person at any time of any right or remedy against any Borrower or any other Loan Party, or against any other person which may be or become liable in respect of all or any part of the Guaranteed Obligations or against any collateral security or guarantee therefor or right of offset with respect thereto. This Guarantee shall remain in full force and effect and be binding in accordance with and to the extent of its terms upon the Guarantors and the successors and assigns thereof, and shall inure to the benefit of the Lenders and the other Secured Parties, and their respective successors and assigns, notwithstanding that from time to time during the term of this Agreement there may be no Guaranteed Obligations outstanding.

SECTION 7.03 Reinstatement. The obligations of the Guarantors under this ARTICLE VII shall be automatically reinstated if and to the extent that for any reason any payment by or on behalf of any Borrower or other Loan Party in respect of the Guaranteed Obligations is rescinded or must be otherwise restored by any holder of any of the Guaranteed Obligations, whether as a result of any Insolvency Proceeding or otherwise. The Guarantors jointly and severally agree that they will indemnify each Secured Party on demand for all reasonable costs and expenses (including reasonable fees of counsel) incurred by such Secured Party in connection with such rescission or restoration, including any such costs and expenses incurred in defending against any claim alleging that such payment constituted a preference, fraudulent transfer or similar payment under any Debtor Relief Law, other than any costs or expenses resulting from the bad faith or willful misconduct of such Secured Party.

SECTION 7.04 Subrogation; Subordination. Each Guarantor hereby agrees that until the indefeasible and irrevocable payment and satisfaction in full in cash of all Guaranteed Obligations and the expiration and termination of the Commitments of the Lenders under this Agreement it shall waive any claim and shall not exercise any right or remedy, direct or indirect, arising by reason of any performance by it of its guarantee in Section 7.01, whether by subrogation or otherwise, against any Borrower or any other Guarantor of any of the Guaranteed Obligations or any security for any of the Guaranteed Obligations. Any Indebtedness of any Loan Party permitted pursuant to Section 6.01(d) (or any other loan or advance between Loan Parties ~~other than the Forward Share Sale Agreement~~) shall be subordinated to such Loan Party's Secured Obligations in a manner reasonably satisfactory to the Administrative Agent.

SECTION 7.05 Remedies. The Guarantors jointly and severally agree that, as between the Guarantors and the Lenders, the obligations of Borrowers under this Agreement and the Notes, if any, may be declared to be forthwith due and payable as provided in Section 8.01 (and shall be deemed to have become automatically due and payable in the circumstances provided in Section 8.01) for purposes of Section 7.01, notwithstanding any stay, injunction or other prohibition preventing such declaration (or such obligations from becoming automatically due and payable) as against Borrowers and that, in the event of such declaration (or such obligations being deemed to have become automatically due and payable), such obligations (whether or not due and payable by Borrowers) shall forthwith become due and payable by the Guarantors for purposes of Section 7.01.

SECTION 7.06 Instrument for the Payment of Money. Each Guarantor hereby acknowledges that the guarantee in this ARTICLE VII constitutes an instrument for the payment of money, and consents and agrees that any Lender or Agent, at its sole option, in the event of a dispute by such Guarantor in the payment of any moneys due hereunder, shall have the right to bring a motion-action under New York CPLR Section 3213.

SECTION 7.07 Continuing Guarantee. The guarantee in this ARTICLE VII is a continuing guarantee of payment, and shall apply to all Guaranteed Obligations whenever arising.

SECTION 7.08 General Limitation on Guarantee Obligations. In any action or proceeding involving any state corporate limited partnership or limited liability company law, or any Debtor Relief Law, if the obligations of any Guarantor under Section 7.01 would otherwise be held or determined to be void, voidable, invalid or unenforceable, or subordinated to the claims of any other creditors, on account of the amount of its liability under Section 7.01, then, notwithstanding any other provision to the contrary, the amount of such liability shall, without any further action by such Guarantor, any Loan Party or any other person, be automatically limited and reduced to the highest amount after giving effect to the rights of contribution established in the Contribution, Intercompany, Contracting and Offset Agreement that are valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding.

SECTION 7.09 Release of Guarantors. If, in compliance with the terms and provisions of the Loan Documents, (a) Equity Interests of any Subsidiary Guarantor are issued, sold or transferred such that it ceases to be a Restricted Subsidiary (a "**Transferred Guarantor**") to a person or persons, none of which is a Loan Party or a Subsidiary, (b) a Guarantor is designated as an Unrestricted Subsidiary in accordance with the Loan Documents, (c) a Restricted Subsidiary that becomes a Loan Party after the Closing Date is subsequently designated as an Excluded Collateral Subsidiary in accordance with the definition thereof, or (d) a Qualified ~~Parent Canadian~~ Borrower IPO shall occur, ~~or (e) Equity Interests in a foreign Subsidiary Guarantor (not organized in a Principal Jurisdiction) are transferred to a U.S. Borrower pursuant to Section 6.09(n);~~ then, such Transferred Guarantor (in the case of clause (a)), such Unrestricted Subsidiary (in the case of clause (b)), such Restricted Subsidiary (in the case of clause (c)), or

Holdings (in the case of ~~clause (d)~~), or such foreign Subsidiary Guarantor (in the case of ~~clause (e)~~), shall, upon the consummation of such issuance, sale or transfer or upon such designation as an Unrestricted Subsidiary or Excluded Collateral Subsidiary or upon the completion of the Qualified ~~Parent~~ Canadian Borrower IPO, be released from its obligations under this Agreement (including under Section 11.03 hereof) and any other Loan Documents to which it is a party and its obligations to pledge and grant any Collateral owned by it pursuant to any Security Document, and the Collateral Agent shall take such actions as are within its powers to effect each release described in this Section 7.09 in accordance with the relevant provisions of the Security Documents and the Intercreditor Agreement; provided that such Guarantor is also released from its obligations, if any, under the Term Loan Documents, the Senior Note Documents, the Additional Senior Secured Indebtedness Documents, any Additional Senior Secured Indebtedness, any Junior Secured Indebtedness, any Other Secured Indebtedness, and other Material Indebtedness guaranteed by such Person on the same terms.

SECTION 7.10 Certain Tax Matters. Notwithstanding the provisions of Sections

2.06(j), 2.15, 2.21 or 2.22, if a Loan Party makes a payment hereunder that is subject to withholding tax in excess of the withholding tax that would have been imposed on payments made by the Borrower with respect to whose obligation it is making a payment, the Loan Parties shall increase the amount of such payment such that, after deduction and payment of all such withholding taxes (including withholding taxes applicable to additional sums payable under this Section), the payee receives an amount equal to the amount it would have received if no such excess withholding tax had been imposed; provided, that the Agent or Lender provides, as reasonably requested by the relevant Loan Party and as required under Sections 2.15(e), 2.15(g), or 2.15(h), as the case may be, such forms, certificates and documentation that it is legally entitled to furnish and would be required to reduce or eliminate withholding and, with respect to non-U.S. withholding taxes, would not, in the Administrative Agent's or the relevant Lender's reasonable judgment, subject it to any material unreimbursed costs or otherwise be disadvantageous to it in any material respect.

SECTION 7.11 German Guarantor.

(a) Subject to Section 7.11(b) through Section 7.11(e) below, the Secured Parties shall not enforce the guarantee obligations of a German Guarantor existing in the form of a German limited liability company or limited partnership with a limited liability company as partner (*GmbH* or *GmbH & Co. KG*) under this Article VII to the extent (i) such German Guarantor guarantees obligations of one of its shareholders or of an affiliated company

(*verbundenes Unternehmen*) of a shareholder within the meaning of Section 15 of the German Stock Corporation Act (*Aktiengesetz*) (other than a Subsidiary of that German Guarantor or the German Guarantor itself), and (ii) the enforcement of such guarantee for shareholder obligations would reduce, in violation of Section 30 of the German Limited Liability Companies Act (*GmbHG*), the net assets (assets minus liabilities minus provisions and liability reserves (*Reinvermögen*), in each case as calculated in accordance with generally accepted accounting principles in Germany (*Grundsätze ordnungsmäßiger Buchführung*) as consistently applied by such German Guarantor in preparing its unconsolidated balance sheets (*Jahresabschluss gem. § 42 GmbH – Act, §§ 242, 264 HGB*) of the German Guarantor (or in the case of a GmbH & Co. KG, its general partner) to an amount that is insufficient to maintain its (or in the case of a GmbH & Co. KG, its general partner's) registered share capital (*Stammkapital*) (or would increase an existing shortage in its net assets below its registered share capital); provided that for the purpose of determining the relevant registered share capital and the net assets, as the case may be:

(i) The amount of any increase of registered share capital (*Stammkapital*) of such German Guarantor (or its general partner in the form of a GmbH) implemented after the Existing Credit Agreement Closing Date that is effected without the prior written consent of the Administrative Agent shall be deducted from the registered share capital of the German Guarantor (or its general partner in the form of a GmbH);

(ii) any loans provided to the German Guarantor by a direct or indirect shareholder or an affiliate thereof (other than a Subsidiary of such German Guarantor) shall be disregarded and not accounted for as a liability to the extent that such loans are subordinated pursuant to Section 39(1) no. 1 through no. 5 of the German Insolvency Code (*Insolvenzordnung*) or subordinated in any other way by law or contract;

(iii) any shareholder loans, other loans and contractual obligations and liabilities incurred by the German Guarantor in violation of the provisions of any of the Loan Documents shall be disregarded and not accounted for as liabilities;

(iv) any assets that are shown in the balance sheet with a book value that, in the opinion of the Administrative Agent, is significantly lower than their market value and that are not necessary for the business of the German Guarantor (*nicht betriebsnotwendig*) shall be accounted for with their market value; and

(v) the assets of the German Guarantor will be assessed at liquidation values (*Liquidationswerte*) if, at the time the managing directors prepare the balance sheet in accordance with paragraph (b) below and absent the demand a positive going concern prognosis (*positive Fortbestehensprognose*) cannot be established.

(b) The limitations set out in Section 7.11(a) only apply:

(i) if and to the extent that the managing directors of the German Guarantor (or in the case of a GmbH Co. KG, its general partner) have confirmed in writing to the Administrative Agent within ten Business Days of a demand for payment under this Article VII the amount of the obligations under this Article VII which cannot be paid without causing the net assets of such German Guarantor (or in the case of a GmbH Co. KG, its general partner) to fall below its registered share capital, or increase an existing

shortage in net assets below its registered share capital (taking into account the adjustments set out above) and such confirmation is supported by a current balance sheet and other evidence satisfactory to the Administrative Agent and neither the Administrative Agent nor any Lender raises any objections against that confirmation within five Business Days after its receipt; or

(ii) if, within twenty Business Days after an objection under clause (i) has been raised by the Administrative Agent or a Lender, the Administrative Agent receives a written audit report (“**Auditor’s Determination**”) prepared at the expense of the relevant German Guarantor by a firm of auditors of international standing and reputation that is appointed by the German Guarantor and reasonably acceptable to the Administrative Agent, to the extent such report identifies the amount by which the net assets of that German Guarantor (or in the case of a GmbH & Co. KG, its general partner in the form of a GmbH) are necessary to maintain its registered share capital as at the date of the demand under this Article VII (taking into account the adjustments set out above). The Auditor’s Determination shall be prepared in accordance with generally accepted accounting principles applicable in Germany (*Grundsätze ordnungsgemäßer Buchführung*) as consistently applied by the German Guarantor in the preparation of its most recent annual balance sheet. The Auditor’s Determination shall be binding for all Parties except for manifest error.

(c) In any event, the Secured Parties shall be entitled to enforce the guarantee up to those amounts that are undisputed between them and the relevant German Guarantor or determined in accordance with Section 7.11(a) and Section 7.11(b). In respect of the exceeding amounts, the Secured Parties shall be entitled to further pursue their claims (if any) and the German Guarantor shall be entitled to provide evidence that the excess amounts are necessary to maintain its registered share capital (calculated as at the date of demand under this Article VII and taking into account the adjustments set out above). The Secured Parties are entitled to pursue those parts of the guarantee obligations of the German Guarantor that are not enforced by operation of Section 7.11(a) above at any subsequent point in time. This Section 7.11 shall apply again as of the time such additional demands are made.

(d) Section 7.11(a) shall not apply as to the amount of Loans borrowed under this Agreement and passed on (whether by way of shareholder loan or equity contribution) to the respective German Guarantor or any of its Subsidiaries as long as the respective shareholder loan is outstanding or the respective equity contribution has not been dissolved or otherwise repaid.

(e) Should it become legally permissible for managing directors of a German Guarantor to enter into guarantees in support of obligations of their shareholders without limitations, the limitations set forth in Section 7.11(a) shall no longer apply. Should any such guarantees become subject to legal restrictions that are less stringent than the limitations set forth in Section 7.11(a) above, such less stringent limitations shall apply. Otherwise, Section 7.11(a) shall remain unaffected by changes in Applicable Law.

(f) The limitations provided for in paragraph (a) above shall not apply where (i) the relevant German Guarantor has a fully valuable (*vollwertig*) recourse claim (*Gegenleistungs- oder Rückgewähranspruch*) vis-à-vis the relevant shareholder or (ii) a domination agreement (*Beherrschungsvertrag*) or a profit and loss pooling agreement (*Gewinnabführungsvertrag*) is or will be in existence with the relevant German Guarantor (or the relevant general partner), unless Section 30 of the German Limited Liability Companies Act is violated despite of the existence of such agreement.

SECTION 7.12 Swiss Guarantors. If and to the extent that (i) the obligations under this ARTICLE VII of any Swiss Guarantor are for the exclusive benefit of any of such Swiss Guarantor’s Affiliates (other than such Swiss Guarantor’s direct or indirect Subsidiaries) and (ii) complying with the obligations under this ARTICLE VII would constitute a repayment of capital (*restitution des apports*) or the payment of a (constructive) dividend (*distribution de dividende*), the following shall apply:

(a) The aggregate obligations under this ARTICLE VII of any Swiss Guarantor shall be limited to the maximum amount of such Swiss Guarantor’s profits and reserves available for distribution, in each case in accordance with, without limitation, articles 671 para.1 to 3 and 675 para.2 of the Swiss Code of Obligations (the “**Available Amount**”) at the time any Swiss Guarantor makes a payment under this ARTICLE VII (provided such limitation is still a legal requirement under Swiss law at that time).

(b) Immediately after having been requested to make a payment under this ARTICLE VII (the “**Guarantee Payment**”), each Swiss Guarantor shall (i) provide the Administrative Agent, within thirty (30) Business Days from being requested to make the Guarantee Payment, with (1) an interim audited balance sheet prepared by the statutory auditors of the applicable Swiss Guarantor, (2) the determination of the Available Amount based on such interim audited balance sheet as computed by the statutory auditors, and (3) a confirmation from the statutory auditors that the Available Amount is the maximum amount which can be paid by the Swiss Guarantor under this ARTICLE VII without breaching the provisions of Swiss corporate law, which are aimed at protecting the share capital and legal reserves, and (ii) upon receipt of the confirmation referred to in the preceding sentence under (3) and after having taken all actions required pursuant to paragraph (d) below, make such Guarantee Payment subject to paragraph (a) above in full (less, if required, any Swiss Withholding Tax pursuant to paragraph (c) below).

(c) If so required under Swiss law (including double tax treaties to which Switzerland is a party) at the time it is required to make a payment under this ARTICLE VII or the Security Documents, the applicable Swiss Guarantor (1) may deduct the Swiss Withholding Tax at the rate of 35% (or such other rate as may be in force at such time) from any payment under this ARTICLE VII or the Security Documents, (2) may pay the Swiss Withholding Tax to the Swiss Federal Tax Administration, and (3) shall notify and provide evidence to the Administrative Agent that the Swiss Withholding Tax has been paid to the Swiss Federal Tax Administration. To the extent the Guarantee Payment due is less than the Available Amount, the applicable Swiss Guarantor shall be required, to the extent permitted by Applicable Law, to make a gross-up, indemnify or otherwise hold harmless the Secured Parties for the deduction of the Swiss Withholding Tax, it being understood that at no time shall the Guarantee Payment (including any gross-up or indemnification payment pursuant to this paragraph (c) and including any Swiss Withholding

Tax levied thereon) exceed the Available Amount. The applicable Swiss Guarantor shall use its best efforts to ensure that any person which is, as a result of a payment under this ARTICLE VII, entitled to a full or partial refund of the Swiss Withholding Tax, shall as soon as possible after the deduction of the Swiss Withholding Tax (i) request a refund of the Swiss Withholding Tax under any Applicable Law (including double tax treaties) and (ii) pay to the Administrative Agent for distribution to the Secured Parties upon receipt any amount so refunded. The Secured Obligations will only be considered as discharged to the extent of the effective payment received by the Secured Parties under this ARTICLE VII. This subsection (c) is without prejudice to the gross-up or indemnification obligations of any Guarantor other than the Swiss Guarantors.

(d) The Swiss Guarantors shall use reasonable efforts to take and cause to be taken all and any other action, including the passing of any shareholders' resolutions to approve any Guarantee Payment under this ARTICLE VII or the Security Documents, which may be required as a matter of Swiss mandatory law or standard business practice as existing at the time it is required to make a Guarantee Payment under this ARTICLE VII or the Security Documents in order to allow for a prompt payment of the Guarantee Payment or Available Amount, as applicable.

(e) To the extent (i) a Swiss Loan Party is otherwise, e.g. jointly and severally, liable towards the Lenders for obligations under this Agreement or any other Loan Document of such Swiss Loan Party's Affiliates (other than such Swiss Loan Party's direct or indirect Subsidiaries) which were incurred for the exclusive benefit of such Swiss Loan Party's Affiliates and (ii) complying with such other obligations would constitute a repayment of capital (*restitution des apports*) or the payment of a (constructive) dividend (*distribution de dividende*), then paragraphs (a) to (d) of this Section 7.12 shall be applicable to such obligations by analogy. For the avoidance of doubt this paragraph is without prejudice to the liability of any Loan Party (other than the Swiss Loan Parties) for any obligations arising under this Agreement or any other Loan Document.

SECTION 7.13 Irish Guarantor. This Guarantee does not apply to any liability to the extent that it would result in this Guarantee constituting unlawful financial assistance within the meaning of, in respect of any Irish Guarantor, Section ~~608~~2014 of the Companies Act ~~1963~~2014 of Ireland.

SECTION 7.14 Brazilian Guarantor. The Brazilian Guarantor waives and shall not exercise any and all rights and privileges granted to guarantors which might otherwise be deemed applicable, including but not limited to the rights and privileges referred to in Articles 827, 834, 835, 836, 837, 838 and 839 of the Brazilian Civil Code and the provisions of Article ~~595~~794 of the new Brazilian Civil Procedure Code.

SECTION 7.15 French Guarantor.

(a) The obligations and liabilities of a French Guarantor under the Loan Documents and in particular under Article VII (Guarantee) of this Agreement shall not include any obligation or liability which if incurred would constitute the provision of financial assistance within the meaning of article L. 225-216 of the French *Code de commerce* and/or would constitute a misuse of corporate assets within the meaning of article L. 241-3 or L. 242-6 of the French *Code de commerce* or any other laws or regulations having the same effect, as interpreted by French courts.

(b) The obligations and liabilities of a French Guarantor under Article VII (Guarantee) of this Agreement for the obligations under the Loan Documents of any other Guarantor which is not a French Subsidiary of such French Guarantor, shall be limited at any time to an amount equal to the aggregate of all amounts borrowed under this Agreement by such other Guarantor as Borrower to the extent directly or indirectly on-lent to the French Guarantor under inter-company loan agreements and outstanding at the date a payment is to be made by such French Guarantor under Article VII (Guarantee) of this Agreement, it being specified that any payment made by a French Guarantor under Article VII (Guarantee) of the Credit Agreement in respect of the obligations of such Guarantor as Borrower shall reduce *pro tanto* the outstanding amount of the inter-company loans due by the French Guarantor under the inter-company loan arrangements referred to above.

(c) The obligations and liabilities of a French Guarantor under Article VII (Guarantee) of this Agreement for the obligations under the Loan Documents of any Guarantor which is its Subsidiary shall not be limited and shall therefore cover all amounts due by such Guarantor as Borrower and/or as Guarantor, as applicable. However, where such Subsidiary is not incorporated in France, the amounts payable by the French Guarantor under this paragraph (c) in respect of obligations of this Subsidiary as Borrower and/or Guarantor, shall be limited as set out in paragraph (b) above.

SECTION 7.16 Belgian Guarantor.

(a) No Belgian Guarantor shall be liable for the obligations owed to the Secured Parties by any other Loan Party under any Loan Document, to the extent that such liability would result in such guarantee constituting unlawful financial assistance within the meaning of Article 329 or 629 of the Belgian Companies Code (or any equivalent and applicable provisions in any relevant jurisdiction).

(b) The obligations and liabilities of a Belgian Guarantor for the obligations, owed from time to time to the Secured Parties, of any other Loan Party (other than its Subsidiaries), under the Loan Documents, and under the Guarantee in particular, shall be limited at any time to the sum of:

(i) the higher of:

(1) 90 % of the Net Assets (as defined below) of such Belgian Guarantor calculated on the basis of

its most recent audited annual financial statements available at the the Aleris Acquisition Closing Date; and

(2) 90 % of the Net Assets (as defined below) of such Belgian Guarantor calculated on the basis of its most recent audited annual financial statements available at the date on which a demand is made on such Belgian Guarantor under this Agreement; and

(ii) the aggregate of all amounts borrowed under this Agreement that were directly or indirectly made available to such Belgian Guarantor (or its direct or indirect Subsidiaries) (regardless of (a) the form thereof, including through the subscription of debt instrument and (b) whether due and payable), and which have not yet been repaid by such Belgian Guarantor (or its direct or indirect Subsidiaries) at the date on which a demand is made on such Belgian Guarantor under this Agreement.

For the purpose of this Section 7.16, “Net Assets” (*actif net/netto actief*) has the meaning given to it in article 320 or 617 of the Belgian Companies Code, and, in the event of a dispute on the amount thereof, a certificate of such amount from the statutory auditors of such Belgian Guarantor (or, if none, or upon request of the Administrative Agent, an independent firm of accountants of international reputation) shall be conclusive, save in the case of manifest error.

The result of the calculation as described under clause (b) above shall in relation to any relevant Belgian Guarantor be referred to as the “Belgian Guaranteed Amount”. Each Belgian Guarantor shall provide the Administrative Agent with a written update on the relevant Belgian Guaranteed Amount upon the request of the Administrative Agent, with such information as the Administrative Agent may reasonably require.

For the avoidance of doubt, no limitation shall apply to the liability of any Belgian Guarantor for any amounts owed by its direct or indirect Subsidiaries under the Loan Documents and the Belgian Guarantor shall be liable for such amounts in full.

ARTICLE VIII

EVENTS OF DEFAULT

SECTION 8.01 Events of Default. Upon the occurrence and during the continuance of the following events (“Events of Default”):

(a) default shall be made in the payment of any principal of any Loan or any Reimbursement Obligation when and as the same shall become due and payable, whether at the due date thereof or at a date fixed for prepayment (whether voluntary or mandatory) thereof or by acceleration thereof or otherwise;

(b) default shall be made in the payment of any interest on any Loan or any Fee or any other amount (other than an amount referred to in paragraph (a) above) due under any Loan Document, when and as the same shall become due and payable, and such default shall continue unremedied for a period of three (3) Business Days;

(c) any representation or warranty made or deemed made in or in connection with any Loan Document or the borrowings or issuances of Letters of Credit hereunder, or which is contained in any certificate furnished by or on behalf of a Loan Party pursuant to this Agreement or any other Loan Document, shall prove to have been false or misleading in any material respect when so made or deemed made;

(d) default shall be made in the due observance or performance by any Company of any covenant, condition or agreement contained in (i) Section 5.02(a), Section 5.03(a), Section 5.08, Section 5.17, Section 9.01(e), Section 9.02(d), Section 9.02(e), Section 9.03, or ARTICLE VI or (ii) Section 5.04(a) or Section 5.04(b) (provided that in the case of defaults under Sections 5.04(a) or (b) which do not impair in any material respect the insurance coverage maintained on the Collateral or the Companies’ assets taken as a whole, then such default will not constitute an Event of Default unless such default has continued unremedied for a period of three (3) Business Days);

(e) (i) default shall be made in the due observance or performance by any Company of any covenant, condition or agreement contained in Section 5.02 (other than Section 5.02(a)), or ARTICLE IX (other than Section 9.01(d), Section 9.02(d), Section 9.02(e), and Section 9.03), and such default shall continue unremedied or shall not be waived for a period of five (5) Business Days after written notice thereof from the Administrative Agent or any Lender to Administrative Borrower, or (ii) default shall be made in the due observance or performance by any Company of any covenant, condition or agreement contained in any Loan Document (other than those specified in paragraphs (a), (b), (d) or (e)(i) immediately above) and such default shall continue unremedied or shall not be waived for a period of thirty (30) days after written notice thereof from the Administrative Agent or any Lender to Administrative Borrower;

(f) any Company shall (i) fail to pay any principal or interest, regardless of amount, due in respect of any Indebtedness (other than the Obligations), when and as the same shall become due and payable beyond any applicable grace period, or (ii) fail to observe or perform any other term, covenant, condition or agreement contained in any agreement or instrument evidencing or governing any such Indebtedness if the effect of any failure referred to in this clause (ii) is to cause, or to permit (in the case of the Senior Notes only, if any notice (a “**Default Notice**”) shall be required to commence a grace period or declare the occurrence of an event of default with regard to the Senior Notes before notice of acceleration may be delivered, delivery of such Default Notice shall constitute a Default hereunder (but not an Event of Default) until such time as the Senior Notes may be accelerated, at which point an Event of Default shall occur hereunder) the holder or holders of such Indebtedness or a trustee or other representative on its or their behalf to cause such Indebtedness to become due prior to its stated maturity or become subject to a mandatory offer purchase by the obligor; provided that, other than in the case of the Term Loans, it shall not constitute an Event of Default pursuant to this paragraph (f) unless the aggregate Dollar Equivalent amount of all such Indebtedness referred to in clauses (i) and (ii) exceeds \$100,000,000 at any one time (provided that, in the case of Hedging Obligations, the amount counted for this purpose shall be

the net amount payable by all Companies if such Hedging Obligations were terminated at such time); provided, further, that this clause (f)(ii) shall not apply to (y) secured Indebtedness that becomes due as a result of the voluntary sale or transfer of the property or assets securing such Indebtedness, if such sale or transfer is permitted hereunder and under the documents providing for such Indebtedness or (z) Indebtedness that becomes due as a result of a notice of voluntary refinancing, exchange, or conversion thereof that is permitted thereunder, so long as such refinancing, exchange or conversion is consummated, or such notice duly withdrawn, in accordance with the terms of such Indebtedness;

(g) an involuntary proceeding shall be commenced or an involuntary petition shall be filed in a court of competent jurisdiction seeking (i) relief in respect of any Loan Party or Material Subsidiary, or of a substantial part of the property of any Loan Party or Material Subsidiary, under Title 11 of the U.S. Code, as now constituted or hereafter amended, or any other federal, state, provincial or foreign bankruptcy, insolvency, receivership, reorganization or other Debtor Relief Law, including any proceeding under applicable corporate law; (ii) the appointment of a receiver, trustee, custodian, sequestrator, conservator, examiner or similar official for any Loan Party or Material Subsidiary or for a substantial part of the property of any Loan Party or Material Subsidiary; or (iii) the windingup, liquidation or examination of any Loan Party or Material Subsidiary; and such proceeding or petition shall continue undismissed for sixty (60) days or an order or decree approving or ordering any of the foregoing shall be entered;

(h) any Loan Party or Material Subsidiary shall (i) voluntarily commence any proceeding or file any petition seeking relief under Title 11 of the United States Code, as now constituted or hereafter amended, or any other federal, state or foreign bankruptcy, insolvency, receivership or other Debtor Relief Law; (ii) consent to the institution of, or fail to contest in a timely and appropriate manner, any proceeding or the filing of any petition described in clause (g) above; (iii) apply for or consent to the appointment of a receiver, trustee, custodian, sequestrator, conservator, examiner or similar official for any Loan Party or Material Subsidiary or for a substantial part of the property of any Loan Party or Material Subsidiary; (iv) file an answer admitting the material allegations of a petition filed against it in any such proceeding; (v) make a general assignment for the benefit of creditors; (vi) become unable, admit in writing its insolvency or inability or fail generally to pay its debts as they become due or, in respect of a German Loan Party, is unable to pay its debts as they fall due (*zahlungsunfähig*) within the meaning of section 17 of the German Insolvency Code (*Insolvenzordnung*) or threatened to become unable to pay its debts (*drohend zahlungsunfähig*) within the meaning of section 18 of the German Insolvency Code or is overindebted within the meaning of section 19 of the German Insolvency Code; (vii) take any action for the purpose of effecting any of the foregoing; (viii) wind up or liquidate (except in accordance with Section 6.05) or put into examination, or (ix) take any step with a view to a moratorium or a composition or similar arrangement with any creditors of any Loan Party or Material Subsidiary, or a moratorium is declared or instituted in respect of the indebtedness of any Loan Party or Material Subsidiary;

(i) one or more judgments, orders or decrees for the payment of money in an aggregate Dollar Equivalent amount in excess of \$100,000,000, to the extent not covered by insurance or supported by a letter of credit or appeal bonds posted in cash, shall be rendered against any Company or any combination thereof and the same shall remain undischarged, unvacated or unbonded for a period of thirty (30) consecutive days during which execution shall not be effectively stayed, or any action shall be legally taken by a judgment creditor to levy upon properties of any Company to enforce any such judgment;

(j) one or more ERISA Events or noncompliance with respect to Foreign Plans or Compensation Plans shall have occurred that, when taken together with all other such ERISA Events and noncompliance with respect to Foreign Plans or Compensation Plans that have occurred, could reasonably be expected to result in liability of any Company and its ERISA Affiliates that could reasonably be expected to result in a Material Adverse Effect;

(k) any security interest and Lien purported to be created by any Security Document shall cease to be in full force and effect, or shall cease to give the Collateral Agent (or its co-agent or subagent), for the benefit of the Secured Parties, a valid, perfected First Priority (subject to the Intercreditor Agreement) security interest in and Lien on all of the Collateral thereunder (except as otherwise expressly provided in such Security Document) in favor of the Collateral Agent (or its co-agent or subagent), or shall be asserted by any Borrower or any other Loan Party not to be a valid, perfected, First Priority (except as otherwise expressly provided in this Agreement, the Intercreditor Agreement or such Security Document) security interest in or Lien on the Collateral covered thereby;

(l) any Loan Document or any material provision thereof shall at any time and for any reason be declared by a court of competent jurisdiction to be null and void, or a proceeding shall be commenced by any Loan Party or by any Governmental Authority, seeking to establish the invalidity or unenforceability thereof (exclusive of questions of interpretation of any provision thereof), or any Loan Party shall repudiate or deny any portion of its liability or obligation for the Obligations;

(m) there shall have occurred a Change in Control;

(n) the Intercreditor Agreement or any material provision thereof shall cease to be in full force or effect other than (i) as expressly permitted hereunder or thereunder, (ii) by a consensual termination or modification thereof agreed to by the Agents party thereto, the Term Loan Administrative Agent, the Term Loan Collateral Agent and all other creditors of the ~~Parent Borrower~~ Designated Company, and its Restricted Subsidiaries (or any trustee, agent or representative acting on their behalf) that are parties thereto, or (iii) as a result of satisfaction in full of the obligations under the Term Loan Documents, the Additional Senior Secured Indebtedness Documents (if any), the Junior Secured Indebtedness Documents (if any) and any other Material Indebtedness subject to the terms of the Intercreditor Agreement;

(o) any Company shall be prohibited or otherwise restrained from conducting the business theretofore conducted by it in any manner that has or could reasonably be expected to result in a Material Adverse Effect by virtue of any determination, ruling, decision, decree or order

of any court or Governmental Authority of competent jurisdiction;

(p) a “Termination Event” (as defined therein) has occurred under a Receivables Purchase Agreement;

then, and in every such event (other than an event with respect to any Loan Party described in paragraph (g) or (h) above), and at any time thereafter during the continuance of such event, the Administrative Agent may, and at the request of the Required Lenders shall, by notice to Administrative Borrower, take either or both of the following actions, at the same or different times: (i) terminate forthwith the Commitments and (ii) declare the Loans and Reimbursement Obligations then outstanding to be forthwith due and payable in whole or in part, whereupon the principal of the Loans and Reimbursement Obligations so declared to be due and payable, together with accrued interest thereon and any unpaid accrued Fees and all other Obligations of the Loan Parties accrued hereunder and under any other Loan Document, shall become forthwith due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived by each of the Loan Parties, anything contained herein or in any other Loan Document to the contrary notwithstanding; and in any event, with respect to any Loan Party described in paragraph (g) or (h) above, the Commitments shall automatically terminate and the principal of the Loans and Reimbursement Obligations then outstanding, together with accrued interest thereon and any unpaid accrued Fees and all other Obligations of the Loan Parties accrued hereunder and under any other Loan Document, shall automatically become due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived by each of the Loan Parties, anything contained herein or in any other Loan Document to the contrary notwithstanding.

SECTION 8.02 Rescission. If at any time after termination of the Commitments or acceleration of the maturity of the Loans, the Loan Parties shall pay all arrears of interest and all payments on account of principal of the Loans and Reimbursement Obligations owing by them that shall have become due otherwise than by acceleration (with interest on principal and, to the extent permitted by law, on overdue interest, at the rates specified herein) and all Defaults (other than non-payment of principal of and accrued interest on the Loans due and payable solely by virtue of acceleration) shall be remedied or waived pursuant Section 11.02, then upon the written consent of the Required Lenders and written notice to the Administrative Borrower, the termination of the Commitments or the acceleration and their consequences may be rescinded and annulled; but such action shall not affect any subsequent Default or impair any right or remedy consequent thereon. The provisions of the preceding sentence are intended merely to bind the Lenders and the Issuing Banks to a decision that may be made at the election of the Required Lenders, and such provisions are not intended to benefit any Loan Party and do not give any Loan Party the right to require the Lenders to rescind or annul any acceleration hereunder, even if the conditions set forth herein are met.

SECTION 8.03 Application of Proceeds. Notwithstanding anything herein to the contrary (but subject to Section 2.14(f) and the terms of the Intercreditor Agreement), during an Event of Default, monies to be applied to the Secured Obligations, whether arising from payments by Loan Parties, realization on Collateral, setoff or otherwise, shall be allocated as follows (including any payments received with respect to adequate protection payments or other distributions relating to the Secured Obligations during the pendency of any reorganization or insolvency proceeding):

- (a) *First*, to all costs and expenses, including Extraordinary Expenses, owing to any Agent or Receiver;
- (b) *Second*, to all amounts owing to a Swingline Lender on Swingline Loans;
- (c) *Third*, to all amounts owing to Issuing Banks on LC Obligations;
- (d) *Fourth*, to all Secured Obligations constituting fees (other than Secured Bank Product Obligations);
- (e) *Fifth*, to all Secured Obligations constituting interest (other than Secured Bank Product Obligations);
- (f) *Sixth*, to cash collateralize all outstanding Letters of Credit in an amount equal to 105% of LC Exposure;
- (g) *Seventh*, to all Loans; and
- (h) *Eighth*, to all other Secured Obligations.

Amounts shall be applied to each category of Secured Obligations set forth above until Full Payment thereof and then to the next category. If amounts are insufficient to satisfy a category, they shall be applied on a pro rata basis among the Secured Obligations in the category. Amounts distributed with respect to any Secured Bank Product Obligations shall be the lesser of the maximum Secured Bank Product Obligations last reported to Administrative Agent or the actual Secured Bank Product Obligations as calculated by the methodology reported to Administrative Agent for determining the amount due. No Agent shall have any obligation to calculate the amount to be distributed with respect to any Secured Bank Product Obligations, and Administrative Agent may request a reasonably detailed calculation of such amount from the applicable Secured Party. If a Secured Party fails to deliver such calculation within five days following request by Administrative Agent, Administrative Agent may assume the amount to be distributed is zero. The allocations set forth in this Section are solely to determine the rights and priorities of Administrative Agent and Secured Parties as among themselves, and may be changed by agreement among them without the consent of any Loan Party. This Section is not for the benefit of or enforceable by any Loan Party.

ARTICLE IX

COLLATERAL ACCOUNT; COLLATERAL MONITORING; APPLICATION OF COLLATERAL PROCEEDS

Each Loan Party covenants and agrees with each Lender that so long as this Agreement shall remain in effect and until Full Payment of the Obligations, unless Administrative Agent, or the Required Lenders, shall otherwise consent in writing:

SECTION 9.01 Accounts; Cash Management

The Loan Parties in the United States, Canada, England and Wales, Switzerland, and Germany (and any other jurisdiction in which a Borrower, Borrowing Base Guarantor or Receivables Seller is located) (the “**Borrowing Base Loan Parties**”) shall maintain a cash management system which is acceptable to the Administrative Agent (the “**Cash Management System**”), which shall operate as follows:

(a) All funds held by any Borrowing Base Loan Party (other than funds being collected pursuant to the provisions stated below) shall be deposited in one or more bank accounts or securities investment accounts, in form and substance reasonably satisfactory to Administrative Agent subject to the terms of the Security Agreement and applicable Control Agreements.

(b) Each Borrowing Base Loan Party shall establish and maintain, at its sole expense, blocked accounts, charged accounts, or lockboxes and related deposit accounts (in each case, “**Blocked Accounts**”), which, on the ~~Closing~~[Amendment No. 2 Effective](#) Date, shall consist of the accounts listed as such on [Schedule 9.01\(b\) to Amendment No. 2](#) and related lockboxes maintained by the financial institutions listed on such schedule (or another financial institution acceptable to Administrative Agent), with such banks as are acceptable to Administrative Agent into which each Loan Party shall promptly deposit and direct their respective Account Debtors to directly remit all payments on Accounts and all payments constituting proceeds of Inventory or other Collateral (other than proceeds of a Casualty Event or an Asset Sale that do not require a repayment under Loan Documents, and subject to the Intercreditor Agreement) in the identical form in which such payments are made, whether by cash, check or other manner and shall be identified and segregated from all other funds of the Loan Parties (except, with regard to accounts located in Europe, to the extent permitted pursuant to the applicable U.K. Security Agreement, Swiss Security Agreement, or German Security Agreement, or Control Agreements, or with respect to accounts located in any other European country, the applicable Control Agreement or other Security Documents applicable thereto). Each Borrowing Base Loan Party shall deliver, or cause to be delivered, to Collateral Agent a Control Agreement duly authorized, executed and delivered by each bank where a Blocked Account for the benefit of any Borrowing Base Loan Party is maintained, and, except as provided in [Section 9.01\(d\)](#), by each bank where any other deposit account of a Borrowing Base Loan Party is from time to time maintained. Each Borrowing Base Loan Party shall further execute and deliver such agreements and documents as Administrative Agent may reasonably require in connection with such Blocked Accounts and such Control Agreements. No Borrowing Base Loan Party shall establish any deposit accounts after the Closing Date, unless such Loan Party has given the Administrative Agent 30 days’ (or such shorter period as may be determined by the Administrative Agent in its sole discretion) prior written notice of its intention to establish such new account and has complied in full with the provisions of this [Section 9.01\(b\)](#) with respect to such deposit accounts. Each Borrowing Base Loan Party agrees that from and after the delivery of an Activation Notice (as defined below), all payments made to such Blocked Accounts or other funds received and collected by any Secured Party, whether in respect of the Accounts, as proceeds of Inventory or other Collateral (subject to the Intercreditor Agreement) or otherwise shall be treated as payments to the Secured Parties in respect of the Secured Obligations and therefore shall constitute the property of the Secured Parties to the extent of the then outstanding Secured Obligations and may be applied by the Administrative Agent in accordance with [Section 9.01\(e\)](#).

(c) With respect to the Blocked Accounts of the U.S. Borrowers and such other Borrowing Base Loan Parties as the Administrative Agent shall determine in its sole discretion, the applicable bank maintaining such Blocked Accounts shall agree to forward daily all amounts in each Blocked Account to one Blocked Account designated as a concentration account in the name listed on [Schedule 9.01\(b\) to Amendment No. 2](#) (the “**Concentration Account**”) at a bank acceptable to the Administrative Agent that shall be designated as the Concentration Account bank for the Loan Parties (the “**Concentration Account Bank**”), which, on the ~~Closing~~[Amendment No. 2 Effective](#) Date, shall consist of the accounts listed as such on [Schedule 9.01\(b\) to Amendment No. 2](#) maintained by the financial institutions listed on such schedule (or other financial institution acceptable to the Administrative Agent). Each Bank providing a Blocked Account shall agree to follow the instructions of the Collateral Agent with regard to each such Blocked Account, including the Concentration Account, including, from and after the receipt of a notice (an “**Activation Notice**”) from the Collateral Agent (which Activation Notice may (or shall, upon the written instruction of the Required Lenders) be given by Collateral Agent at any time from and after the occurrence of a Cash Dominion Trigger Event and prior to a Cash Dominion Recovery Event) pursuant to the applicable Control Agreement, to follow only the instructions of the Collateral Agent (and not those of any Loan Party) with respect to the Blocked Accounts

(including the Concentration Account), including (i) to forward daily all amounts in the Concentration Account to the account designated as the collection account (the “**Collection Account**”), which shall be under the exclusive dominion and control of the Collateral Agent (it being understood that, prior to the delivery of an Activation Notice, the respective Loan Parties shall also be authorized to issue instructions with regard to funds in the Concentration Account), and (ii) with respect to the Blocked Accounts to forward all amounts in each Blocked Account to the applicable Collection Account or as the Collateral Agent otherwise directs and to commence the process of daily sweeps from such Blocked Account into the Collection Account or otherwise under [Section 9.01](#) or as the Collateral Agent otherwise directs.

(d) Notwithstanding any provision of this [Section 9.01](#) to the contrary, (A) Borrowing Base Loan Parties may maintain zero balance disbursement accounts and accounts used solely to fund payroll, payroll taxes or employee benefits in the ordinary course of business, provided that no Borrowing Base Loan Parties shall accumulate or maintain cash in such accounts as of any date of determination in excess of checks outstanding against such accounts as of that date and amounts necessary to meet minimum balance requirements or Applicable Law and (B) Borrowing Base Loan Parties may maintain local cash accounts that are not a part of the Cash Management Systems which individually do not

at ~~any time~~ the end of each day in the applicable jurisdiction contain funds in excess of \$100,000 and, together with all other such local cash accounts, do not exceed \$2,000,000.

(e) From and after the delivery of an Activation Notice, unless an Event of Default has occurred and is continuing (in which event Section 8.03 shall apply) and unless Administrative Agent determines to release such funds to the Borrowers in accordance with this Section 9.01(e), Administrative Agent shall apply all funds of a Borrower or Borrowing Base Guarantor organized under the laws of the same jurisdiction of such Borrower that are in or are received into a Collection Account or that are otherwise received under this Section 9.01 by the Administrative Agent or the Collateral Agent (except to the extent constituting Pari Passu Priority Collateral or otherwise not required to be paid pursuant to Section 2.10) on a daily basis to the repayment of (i) *first*, Fees and reimbursable expenses of the Administrative Agent and the Collateral Agent then due and payable by such Borrower and such Borrowing Base Guarantors; (ii) *second*, to interest then due and payable on all Loans to such Borrower, (iii) *third*, Overadvances to such Borrower, (iv) *fourth*, the Swingline Loans to such Borrower, (v) *fifth*, Base Rate Loans to such Borrower, pro rata, (vi) *sixth*, Eurocurrency Loans and EURIBOR Loans to such Borrower, pro rata, together with all accrued and unpaid interest thereon; provided, however, that payments on such Eurocurrency Loans and EURIBOR Loans with respect to which the application of such payment would result in the payment of the principal prior to the last day of the relevant Interest Period shall be transferred to the Cash Collateral Account to be applied to such Eurocurrency Loans or EURIBOR Loans on the last day of the relevant Interest Period of such Eurocurrency Loan or EURIBOR Loan or to the Obligations owing by such Borrower and Borrowing Base Guarantors as they come due (whether at stated maturity, by acceleration or otherwise). After payment in full has been made of the amounts required under subsections (i)-(vi) in the preceding sentence, all funds in a Collection Account or otherwise received under this Section 9.01 (except to the extent not required to be paid hereunder) shall be applied on a daily basis to all amounts described in subsections (i)-(vi) in the preceding sentence owing by any other Loan Parties, in the order set out therein. Notwithstanding the foregoing sentences, after payment in full has been made of the amounts required under subsections (i)-(vi) in the two preceding sentences, upon Administrative Borrower's request and as long as no Default has occurred and is continuing and all other conditions precedent to a Borrowing have been satisfied, any additional funds deposited in a Collection Account or a Cash Collateral Account shall be released to the applicable Borrowing Base Loan Party. In addition, if consented to by the Administrative Agent or the Required Lenders, such funds in a Cash Collateral Account may be released to the applicable Borrowing Base Loan Party. Notwithstanding the above, if the Administrative Agent has declared the Loans and/or Reimbursement Obligations then outstanding to be forthwith due and payable in whole or in part pursuant to Section 8.01 or if an Event of Default has occurred and is continuing, the Administrative Agent shall apply all funds received in the Collection Account in accordance with Section 8.03. If this Section 9.01(e) applies, the Administrative Agent will use reasonable efforts to cooperate with the Administrative Borrower in structuring the payments under this Section 9.01(e) in a manner that would minimize withholding taxes imposed on such payments.

(f) Each Loan Party following delivery of an Activation Notice shall, acting as trustee for Collateral Agent, receive, as the property of Collateral Agent for the benefit of the Secured Parties, any monies, checks, notes, drafts or any other payment relating to and/or proceeds of Accounts, Inventory or other Collateral (subject to the Intercreditor Agreement) which come into their possession or under their control and immediately upon receipt thereof, shall deposit or cause the same to be deposited in the Blocked Accounts, or remit the same or cause the same to be remitted, in kind, to Collateral Agent. In no event shall the same be commingled with any Loan Party's own funds (except, with regard to accounts located in Europe, to the extent permitted pursuant to the applicable U.K. Security Agreement, Swiss Security Agreement, or German Security Agreement, or Control Agreements, or with respect to accounts located in any other European country, the applicable Control Agreement or other Security Documents applicable thereto). Each Loan Party agrees to reimburse Collateral Agent on demand for any amounts owed or paid to any bank at which a Blocked Account is established or any other bank or person involved in the transfer of funds to or from the Blocked Accounts arising out of Collateral Agent's payments to or indemnification of such bank or person.

(g) With regard to accounts located in Europe, the Collateral Agent may, in its sole discretion, agree pursuant to the Security Documents to vary the cash management procedures set forth herein, including as documented in the applicable U.K. Security Agreement, Swiss Security Agreement, or German Security Agreement, or Control Agreements, or with respect to accounts located in any other European country, the applicable Control Agreement or other Security Documents applicable thereto) and including, subject to Section 6.07, with regard to the Cash Pooling Arrangements. To the extent that any Security Document sets forth cash management that varies from this Section 9.01, the applicable Loan Parties shall comply with such Security Documents, and shall comply with this Section 9.01 to the extent not inconsistent therewith.

(h) Each Borrowing Base Loan Party, and each other Loan Party that is organized in a Principal Jurisdiction, shall, prior to entering into a Permitted German Alternative Financing, a Permitted Novelis Switzerland Financing or a Permitted Customer Account Financing, arrange its cash management system, in a manner reasonably satisfactory to the Administrative Agent, so as to cause its receipts in respect of Accounts that are subject to such a financing or other transaction (or receipts in respect of Accounts generated from Inventory included in such a financing or other transaction) to be to be segregated from (and not commingled therewith) receipts of its other Accounts.

SECTION 9.02 Administration of Inventory and Accounts

(a) Records and Reports of Inventory. Each Borrower and Borrowing Base Guarantor shall keep accurate and complete records of its Inventory, including costs and daily withdrawals and additions thereto, and shall submit to Administrative Agent inventory and reconciliation reports in form reasonably satisfactory to Administrative Agent, upon Administrative Agent's reasonable request. Each Loan Party shall conduct a physical inventory at least once per calendar year (and on a more frequent basis if requested by Administrative Agent during the continuation of an Event of Default) and periodic cycle counts consistent with historical practices, and shall provide to Administrative Agent a report based

on each such inventory and count promptly upon completion thereof, together with such supporting information as Administrative Agent may reasonably request. Administrative Agent may participate in and observe each physical count.

(b) Returns of Inventory. No Borrower or Borrowing Base Guarantor shall return any Inventory to a supplier, vendor or other Person, whether for cash, credit or otherwise, unless (i) such return is in the ordinary course of business, consistent with past practices and undertaken in good faith; (ii) no Default, Event of Default or Overadvance exists or would result therefrom; (iii) Administrative Agent is promptly notified if the aggregate value of all Inventory returned in any month exceeds \$10,000,000; and (iv) during the existence of any Event of Default or at any time after the occurrence of a Cash Dominion Trigger Event and prior to the subsequent occurrence of a Cash Dominion Recovery Event, any payment received by a Loan Party for a return is promptly remitted to Administrative Agent for application to the Secured Obligations.

(c) Acquisition, Sale and Maintenance of Inventory. The Loan Parties shall use, store and maintain all Inventory with reasonable care and caution, in accordance with applicable standards of any insurance and in conformity with all Applicable Law, and shall make current rent payments (within applicable grace periods provided for in leases) at all locations where any Collateral is located.

(d) Records and Schedules of Accounts. Each Loan Party shall keep accurate and complete records of its Accounts in all material respects, including all payments and collections thereon, and shall submit to Administrative Agent sales, collection, reconciliation and other reports in form satisfactory to Administrative Agent, on such periodic basis as Administrative Agent may reasonably request.

(e) Taxes. If an Account of any Borrower or Borrowing Base Guarantor includes a charge for any Taxes, Administrative Agent is authorized, in its discretion, upon notice to the Administrative Borrower, to pay the amount thereof to the proper Taxing Authority for the account of such Borrower or Borrowing Base Guarantor and to charge Borrowers therefor; provided, however, that neither any Agent nor any Lender shall be liable for any Taxes that may be due from any Loan Party or with respect to any Collateral.

(f) Account Verification. During a Default or Event of Default, at any time after the occurrence of a Reporting Trigger Event and prior to the subsequent occurrence of a Reporting Recovery Event and in connection with its field examinations, Administrative Agent shall have the right, in the name of Administrative Agent, any designee of Administrative Agent or any Loan Party, to verify the validity, amount or any other matter relating to any Accounts of any Borrower or Borrowing Base Guarantor (including Accounts purchased pursuant to a Receivables Purchase Agreement) by mail, telephone or otherwise; provided that, in the absence of an Event of Default such verification shall be limited to telephone calls made by a representative of a Loan Party, upon reasonable prior notice from Administrative Agent, in the presence of a representative of Administrative Agent to an applicable Account Debtor or a Person otherwise obligated on such Accounts, as the case may be. Loan Parties shall cooperate fully with Administrative Agent in an effort to facilitate and promptly conclude any such verification process.

SECTION 9.03 Borrowing Base-Related Reports. The Borrowers shall deliver or cause to be delivered (at the expense of the Borrowers) to the Collateral Agent and the Administrative Agent the following (and the Administrative Agent shall make available to the Lenders, on the Platform or otherwise, in accordance with its customary procedures):

(a) in no event less frequently than ~~fifteen~~twenty (~~15~~20) days after the end of each month for the month most recently ended (or, if such day is not a Business Day, the next succeeding Business Day), a Borrowing Base Certificate from the Administrative Borrower accompanied by such supporting detail and documentation as shall be reasonably requested by the Administrative Agent in its Permitted Discretion (which, during the Aleris Deemed Borrowing Base Period, shall include the information described in the last paragraph of this Section 9.03); provided that, if during the first month of any fiscal quarter the Total Revolving Exposure does not at any time exceed 25% of the Total Borrowing Base (as reported in the Borrowing Base Certificate most recently delivered pursuant to the terms of this Agreement) and no Default is then continuing, the Administrative Borrower shall not be required to deliver a Borrowing Base Certificate with regard to such month; provided further, that after the occurrence of a Covenant Trigger Event and until the occurrence of a corresponding Covenant Recovery Event, Administrative Borrower shall deliver an additional weekly rollforward of Accounts as referenced in paragraph (b)(i) below (both consolidated and segregated by Borrower (or Borrowing Base Guarantor) and region) within five (5) Business Days after the end of each calendar week, and, if requested by the Administrative Agent or the Required Lenders, a Borrowing Base Certificate reflecting such updated Account information (prepared weekly) within five (5) Business Days after the end of each calendar week, or, when a Default is continuing, more frequent Borrowing Base Certificates reflecting shorter periods as reasonably requested by the Administrative Agent or the Required Lenders. Each Borrowing Base Certificate shall reflect all information through the end of the appropriate period for Borrower and each Borrowing Base Guarantor, both in consolidated form and segregated by Borrower (or Borrowing Base Guarantor) and region. In addition, the Administrative Borrower shall promptly (and in any event within five (5) Business Days) after the occurrence thereof provide to the Collateral Agent and the Administrative Agent a revision to the most recently delivered Borrowing Base Certificate, which revised certificate shall report the Borrowing Base as of the last day of the month (or week, after the occurrence of a Covenant Trigger Event and until the occurrence of a corresponding Covenant Recovery Event) covered by such certificate, demonstrating the pro forma effect of the following on the Borrowing Base: (i) any event not in the ordinary course of business (including a casualty event, a sale or other disposition, or any other event resulting in the ineligibility of Accounts or Inventory that are included as Eligible Accounts or Eligible Inventory in the most recently delivered Borrowing Base Certificate) which causes such Accounts or Inventory in excess of ~~\$25,000,000~~\$37,500,000 included in the Total Borrowing Base no longer to be Eligible Accounts or Eligible Inventory or (ii) entry into any Permitted German Alternative Financing, Permitted Novelis Switzerland Financing or any Permitted Customer Account Financing. After any Restricted Subsidiary organized in Germany or any political subdivision thereof enters into any Permitted German Alternative Financing, all of the Accounts and Inventory of such Company (and each other Company organized in Germany or any political subdivision thereof), including any Accounts of any such Person that were sold pursuant to a Receivables Purchase Agreement prior to such Permitted German Alternative Financing, shall be ineligible for inclusion in the Borrowing Base. In the event

that any Restricted Subsidiary enters into a Permitted Customer Account Financing or a Permitted Novelis Switzerland Financing, until such time that the Administrative Borrower has delivered an updated Borrowing Base Certificate reflecting such transaction, the Administrative Agent may establish a Reserve with respect to the subject Accounts.

(b) upon request by the Administrative Agent, and in no event less frequently than thirty (30) days after the end of (i) each month, a monthly trial balance showing Accounts outstanding aged from statement date as follows: 1 to 30 days, 31 to 60 days, 61 to 90 days and 91 days or more, accompanied by a comparison to the prior month's trial balance and such supporting detail and documentation as shall be requested by the Administrative Agent in its Permitted Discretion and (ii) each month, a summary of Inventory by location and type (differentiating raw materials, work-in-process, and finished goods) accompanied by such supporting detail and documentation as shall be requested by the Administrative Agent in its Permitted Discretion; provided that, if during the first month of any fiscal quarter the Total Revolving Exposure (excluding LC Exposure in respect of Letters of Credit outstanding as of the Closing Date) does not at any time exceed 25% of the Adjusted Total Revolving Commitment and no Default is then continuing, the Administrative Borrower shall not be required to deliver such monthly trial balance or summary of Inventory with regard to such month;

(c) promptly upon request by the Administrative Agent (which request shall not be made more often than once per fiscal quarter except after the occurrence of a Reporting Trigger Event and prior to the subsequent occurrence of a Reporting Recovery Event), copies of each German Borrower's updated or new supply contracts, purchase orders, invoices, and any related statements of general terms and conditions, in each case with respect to suppliers having an average transactional volume with the Companies in excess of \$10,000,000 per month;

(d) in no event less frequently than ~~fifteen~~twenty (~~+15~~+20) days after the end of each month for the month most recently ended (or, if such day is not a Business Day, the next succeeding Business Day), a report listing German accounts payable by payee, in a form reasonably satisfactory to the Administrative Agent; provided that, if during the first month of any fiscal quarter the Total Revolving Exposure (excluding LC Exposure in respect of Letters of Credit outstanding as of the Closing Date) does not at any time exceed 25% of the Adjusted Total Revolving Commitment and no Default is then continuing, the Administrative Borrower shall not be required to deliver such report with regard to such month;

(e) in no event less frequently than ~~fifteen~~twenty (~~+15~~+20) days after the end of each month for the month most recently ended (or, if such day is not a Business Day, the next succeeding Business Day) a report reflecting the ownership of sheet ingot Inventory located and cast at Norf GmbH, provided that after the occurrence of a Reporting Trigger Event and until the occurrence of a corresponding Reporting Recovery Event, Administrative Borrower shall deliver, if requested by the Administrative Agent or the Required Lenders, such reports on a more frequent basis; and

(f) such other reports, statements and reconciliations with respect to the Borrowing Base or Collateral of any or all Loan Parties as the Administrative Agent shall from time to time request in its Permitted Discretion.

The delivery of each certificate and report or any other information delivered pursuant to this Section 9.03 shall constitute a representation and warranty by the Borrowers that the statements and information contained therein are true and correct in all material respects on and as of the date referred to therein.

During the Aleris Deemed Borrowing Base Period, in each Borrowing Base Certificate delivered under this Agreement, and in each certificate otherwise delivered in accordance with the last sentence of this paragraph, the Designated Company shall specify each Aleris Borrower's allocation of the Deemed Borrowing Base Cap (such allocation in effect for each Aleris Borrower from time to time, such Aleris Borrower's "Deemed Borrowing Base Allocation"); provided that the aggregate amount of all Deemed Borrowing Base Allocations of all Aleris Borrowers shall not exceed the Deemed Borrowing Base Cap at any time; provided, further, that if any such certificate does not specify a Deemed Borrowing Base Allocation for any Aleris Borrower (or if such Person was not an Aleris Borrower at the time the most recent such certificate was delivered to the Administrative Agent), such Aleris Borrower's Deemed Borrowing Base Allocation shall be zero. During the Aleris Deemed Borrowing Base Period, on no more than two occasions per calendar month, the Designated Company may deliver a certificate to the Administrative Agent executed by a Financial Officer of the Designated Company, reallocating the Deemed Borrowing Base Allocation of each Aleris Borrower among the Aleris Borrowers and setting forth the effective date of such reallocation (which date shall be at least 2 Business Days after the date that such certificate is delivered to the Administrative Agent); provided that (x) such certificate shall attach an updated copy of the Borrowing Base Certificate most recently delivered to the Administrative Agent, which no changes other than to give effect to the new Deemed Borrowing Base Allocations, and (y) after giving effect to such reallocation, the aggregate amount of all Deemed Borrowing Base Allocations of all Aleris Borrowers shall not exceed the Deemed Borrowing Base Cap.

SECTION 9.04 Rescission of Activation Notice. Notwithstanding any of the provisions of Section 9.01 to the contrary, after Collateral Agent has delivered an Activation Notice and upon delivery of a certificate by a Financial Officer of the Administrative Borrower to the Administrative Agent certifying that a Cash Dominion Recovery Event has occurred with respect to the outstanding Cash Dominion Trigger Event, the Collateral Agent shall rescind the Activation Notice by written notice, as necessary, to the applicable Concentration Account Banks and any such other banks to which Collateral Agent had issued such Activation Notice and following such rescission the Cash Management System shall be operated as if no such Activation Notice had been given.

ARTICLE X

THE ADMINISTRATIVE AGENT AND THE COLLATERAL AGENT

SECTION 10.01 Appointment, Authority and Duties of Agents.

(a) Appointment and Authority. Each Secured Party appoints and designates Wells Fargo as Administrative Agent and as Collateral Agent under all Loan Documents.

Each Agent may, and each Secured Party authorizes each Agent to, enter into all Loan Documents to which such Agent is intended to be a party and accept all Security Documents, for the benefit of Secured Parties. Each Secured Party agrees that any action taken by any Agent or Required Lenders in accordance with the provisions of the Loan Documents, and the exercise by any Agent or Required Lenders of any rights or remedies set forth therein, together with all other powers reasonably incidental thereto, shall be authorized by and binding upon all Secured Parties. Without limiting the generality of the foregoing, the Administrative Agent and the Collateral Agent shall have the sole and exclusive authority to (a) in the case of the Administrative Agent, act as the disbursing and collecting agent for Lenders with respect to all payments and collections arising in connection with the Loan Documents; (b) execute and deliver as Administrative Agent or as Collateral Agent, respectively, each Loan Document, including any intercreditor or subordination agreement, and accept delivery of each Loan Document from any Loan Party or other Person; (c) in the case of the Collateral Agent, act as collateral agent for Secured Parties for purposes of perfecting and administering Liens under the Loan Documents, and for all other purposes stated therein; (d) in the case of the Collateral Agent, manage, supervise or otherwise deal with Collateral; (e) in the case of the Collateral Agent, take any Enforcement Action with respect to the Collateral or otherwise exercise any rights or remedies with respect to any Collateral under the Loan Documents, Applicable Law or otherwise; and (f) take any other Enforcement Action. The duties of each Agent shall be ministerial and administrative in nature, and no Agent shall have a fiduciary relationship with any Secured Party, Participant or other Person, by reason of any Loan Document or any transaction relating thereto. Administrative Agent alone shall be authorized to determine whether any Accounts or Inventory constitute Eligible Accounts or Eligible Inventory, or whether to impose or release any reserve, and to exercise its Permitted Discretion in connection therewith, which determinations and judgments, if exercised in good faith, shall exonerate Administrative Agent from liability to any Lender or other Person for any error in judgment. ~~Pursuant to article 1161 of the French code civil, the Lenders hereby expressly authorize the French Collateral Agent to act on the behalf and for the account of the Lenders and in its own name and for its own account as creditor under the Parallel Debt provision set forth in Section 11.24, in connection with the performance of the Loan Documents.~~

(b) Duties. No Agent shall have any duties except those expressly set forth in the Loan Documents. The conferral upon any Agent of any right shall not imply a duty on such Agent's part to exercise such right, unless instructed to do so (i) in the case of the Administrative Agent, by Required Lenders in accordance with this Agreement and (ii) in the case of the Collateral Agent, by Administrative Agent in accordance with this Agreement.

(c) Agent Professionals. Each Agent may perform its duties through agents and employees. Each Agent may consult with and employ Agent Professionals, and shall be entitled to act upon, and shall be fully protected in any action taken in good faith reliance upon, any advice given by an Agent Professional. No Agent shall be responsible for the negligence or misconduct of any agents, employees or Agent Professionals selected by it with reasonable care.

(d) Instructions of Required Lenders. The rights and remedies conferred upon each Agent under the Loan Documents may be exercised without the necessity of joinder of any other party, unless required by Applicable Law. Each Agent may request instructions from Required Lenders or other Secured Parties with respect to any act (including the failure to act) in connection with any Loan Documents, and may seek assurances to its satisfaction from Secured Parties of their indemnification obligations against all Claims that could be incurred by such Agent in connection with any act. Each Agent shall be entitled to refrain from any act until it has received such instructions or assurances, and no Agent shall incur liability to any Person by reason of so refraining. Instructions of Required Lenders shall be binding upon all Secured Parties, and no Secured Party shall have any right of action whatsoever against any Agent as a result of such Agent acting or refraining from acting in accordance with the instructions of Required Lenders. Notwithstanding the foregoing, instructions by and consent of Secured Parties shall be required in the circumstances described in Section 11.02. In no event shall any Agent be required to take any action that, in its opinion, is contrary to Applicable Law or any Loan Documents or could subject any Agent Indemnitee to personal liability.

SECTION 10.02 Agreements Regarding Collateral and Field Examination Reports.

(a) Lien Releases; Care of Collateral. Secured Parties authorize Collateral Agent to release any Lien with respect to any Collateral (a) upon Full Payment of the Secured Obligations; (b) that is the subject of a sale, lease, license, consignment, transfer or other disposition which Administrative Borrower certifies in writing to Administrative Agent and Collateral Agent is permitted by Section 6.06 (provided that no Lien shall be released in any Series of Cash Neutral Transactions or in any Asset Sale to another Loan Party) (and Agent may rely conclusively on any such certificate without further inquiry); (c) that does not constitute a material part of the Collateral; (d) if the property subject to such Lien is owned by a Guarantor, upon release of such Guarantor from its obligations under its Guarantee pursuant to Section 7.09; (e) that is the subject of a Lien which Administrative Borrower certifies in writing to Administrative Agent and Collateral Agent is permitted by Section 6.02(n)(x) or (y) (and Agent may rely conclusively on any such certificate without further inquiry); (f) ~~which is subject to a transfer to a U.S. Borrower pursuant to Section 6.09(n), to the extent (and only to the extent) release thereof is permitted (in part or whole) pursuant to the Term Loan Documents (and any Permitted Term Loan Facility Refinancings of any of such Indebtedness); (g)~~ with the written consent of the Required Lenders or such other number of Lenders whose consent is required under Section 11.02 or (h) to the extent such Lien attaches to property that would otherwise constitute Excluded Property. Secured Parties authorize Collateral Agent to subordinate or release its Liens to any a Lien permitted hereunder that secures a Purchase Money Obligation or Capital Lease Obligation permitted hereunder. No Agent shall have any obligation to assure that any Collateral exists or is owned by a Loan Party, or is cared for, protected or insured, nor to assure that Collateral Agent's Liens have been properly created, perfected or enforced, or are entitled to any particular priority, nor to exercise any duty of

care with respect to any Collateral. As of the Amendment No. 1 Effective Date, notwithstanding anything to the contrary in the Intercreditor Agreement, and as permitted by Section 2.4(b)(i) of the Intercreditor Agreement, each Secured Party hereby unconditionally (i) (x) terminates each Mortgage in respect of Real Property located in the United States, Quebec, and the Ouro Preto Real Property located in Brazil, and (y) releases (1) the equipment and inventory owned by the Brazilian Guarantor that is located in Ouro Preto Brazil, and (2) the Real Property located in the United States, Quebec, and the Ouro Preto Real Property located in Brazil, in the case of clauses (1) and (2), from securing the Secured Obligations, and agrees that such Real Property and such Brazilian inventory and equipment shall not constitute "Collateral" or "Mortgaged Property" for any purposes hereunder or under any other Loan Document, and (ii) authorizes and directs (x) the Administrative Agent or the Collateral Agent, as applicable, at the Borrowers' sole cost and expense, promptly upon receipt thereof, to execute and deliver to the ~~Parent Borrower~~ Designated Company documents and agreements that release and discharge the Mortgages and Liens encumbering the Real Property located in the United States, Quebec, and the Ouro Preto Real Property located in Brazil, and to otherwise evidence the release and discharge of the equipment and inventory owned by the Brazilian Guarantor that is located in Ouro Preto Brazil, and (y) any Borrower or any of its Subsidiaries to record or cause any title company, attorney, or other Person to record such documents and agreements effecting such releases and discharges in the United States, Quebec and Brazilian land title records (or local equivalent) and, in the case of such Brazilian inventory and equipment, any applicable filing offices in Brazil, in each case as determined by such Borrower or such Subsidiary. Each Secured Party acknowledges as of the Amendment No. 1 Effective Date, that mortgages over Real Property located in the United States in favor of the Term Loan Administrative Agent or the Term Loan Collateral Agent, as the case may be, shall remain in full force and effect, irrespective of the releases described in the immediately preceding sentence, and that no mortgages over Real Property located in the United States shall be entered into to secure the Secured Obligations from and after the Amendment No. 1 Effective Date.

(b) Possession of Collateral. Each Agent and Secured Party appoints each Lender as agent (for the benefit of Secured Parties) for the purpose of perfecting Liens in any Collateral held or controlled by such Lender, to the extent such Liens are perfected by possession or control. If any Lender obtains possession or control of any Collateral, it shall notify Collateral Agent thereof and, promptly upon Collateral Agent's request, deliver such Collateral to Collateral Agent or otherwise deal with it in accordance with Collateral Agent's instructions.

(c) Field Examination Reports; Confidentiality; Disclaimers by Lenders and Issuing Banks; Other Reports and Information. By becoming a party to this Agreement, each Lender and each Issuing Bank:

(ei) ~~Reports. Each Agent shall promptly forward to each Lender, when complete, copies of any~~ is deemed to have requested that each Agent furnish such Lender and such Issuing Bank, promptly after it becomes available, a copy of each field audit, field examination, or appraisal report ~~prepared by or for such Agent with respect to~~ respecting any Loan Party or ~~Collateral~~ its Subsidiaries (each, a "Report"). ~~Each~~ prepared by or at the request of such Agent, and such Agent shall so furnish each Lender with such Reports;

(ii) expressly agrees ~~(a) that neither Wells Fargo nor any Agent makes and~~ acknowledges that the Agents do not (i) make any representation or warranty as to the accuracy ~~or completeness~~ of any Report, and ~~neither Wells Fargo nor any Agent (ii) shall not~~ be liable for any information contained in or omitted from any Report;

~~(b) (iii) expressly agrees and acknowledges that the Reports are not intended to be comprehensive audits or examinations, and that any each Agent or any other Person party performing any field audit or field examination or appraisal will inspect only specific information regarding Secured Obligations or the Collateral the Loan Parties and their Subsidiaries and will rely significantly upon the Loan Parties Borrowers and their Subsidiaries' books and records as well as upon representations of the Loan Parties' officers and employees; and (c) to keep all Reports confidential and strictly for such Lender's internal use, and not to distribute any Report (or the contents thereof) to any Person (except to such Lender's Participants, attorneys and accountants) or use any Report in any manner other than administration of the Loans and other Secured Obligations. Each Lender shall indemnify and hold harmless each Agent and any other Person preparing a Report from any action such Lender may take as a result of or any conclusion it may draw from any Report, as well as from any Claims arising as a direct or indirect result of any Agent furnishing a Report to such Lender, as well as on representations of Borrowers' personnel;~~

(iv) agrees to keep all Reports and other material, non-public information regarding the Loan Parties and their Subsidiaries and their operations, assets, and existing and contemplated business plans in a confidential manner in accordance with Section 11.12; and

(v) without limiting the generality of any other indemnification provision contained in this Agreement, agrees: (i) to hold each Agent and any other Lender or Issuing Bank preparing a Report harmless from any action the indemnifying Lender or Issuing Bank may take or fail to take or any conclusion the indemnifying Lender or Issuing Bank may reach or draw from any Report in connection with any loans or other credit accommodations that the indemnifying Lender or Issuing Bank has made or may make to Borrowers, or the indemnifying Lender's or Issuing Bank's participation in, or the indemnifying Lender's or Issuing Bank's purchase or issuance of, a loan or loans of Borrowers or any Letters of Credit, and (ii) to pay and protect, and indemnify, defend and hold each Agent, and any such other Lender and Issuing Bank preparing a Report harmless from and against, the claims, actions, proceedings, damages, costs, expenses, and other amounts (including, attorneys' fees and costs) incurred by such Agent and any such other Lender and Issuing Bank preparing a Report as the direct or indirect result of any third parties who might obtain all or part of any Report through the indemnifying Lender or Issuing Bank.

In addition to the foregoing, (x) any Lender or Issuing Bank may from time to time request of each Agent in writing that such Agent provide to such Lender or Issuing Bank a copy of any report or document provided by any Loan Party or its Subsidiaries to such Agent that has not been contemporaneously provided by such Loan Party or such Subsidiary to such Lender or Issuing Bank, and, upon receipt of such request, such

Agent promptly shall provide a copy of same to such Lender or Issuing Bank, and (y) to the extent that each Agent is entitled, under any provision of the Loan Documents, to request additional reports or information from any Loan Party or its Subsidiaries, any Lender or Issuing Bank may, from time to time, reasonably request such Agent to exercise such right as specified in such Lender's or such Issuing Bank's notice to such Agent, whereupon such Agent promptly shall request of Borrowers the additional reports or information reasonably specified by such Lender or Issuing Bank, and, upon receipt thereof from such Loan Party or such Subsidiary, such Agent promptly shall provide a copy of same to such Lender or such Issuing Bank.

(d) Dealings with Collateral Agent. Each Secured Party (other than the Administrative Agent and the Collateral Agent and their respective co-agents and sub-agents) shall deal with the Collateral Agent exclusively through the Administrative Agent and shall not deal directly with the Collateral Agent. The Collateral Agent shall be entitled to act and rely upon the instructions of the Administrative Agent with regard to all matters relating to the Loan Documents and the Collateral.

SECTION 10.03 Reliance by Agents. Each Agent shall be entitled to rely, and shall be fully protected in relying, upon any certification, notice or other communication (including those by telephone, telex, telegram, telecopy or e-mail) believed by it to be genuine and correct and to have been signed, sent or made by the proper Person, and upon the advice and statements of Agent Professionals.

SECTION 10.04 Action Upon Default. No Agent shall be deemed to have knowledge of any Default or Event of Default unless it has received written notice from a Lender or Loan Party specifying the occurrence and nature thereof. If any Lender acquires knowledge of a Default or Event of Default, it shall promptly notify Administrative Agent and the other Lenders thereof in writing. Each Secured Party (other than the Administrative Agent and the Collateral Agent) agrees that, except as otherwise provided in any Loan Documents or with the written consent of Administrative Agent and Required Lenders, it will not (i) take any Enforcement Action, (ii) accelerate Secured Obligations (other than Secured Bank Product Obligations) or (iii) exercise any right that it might otherwise have under Applicable Law to credit bid at foreclosure sales, UCC sales or other similar dispositions of Collateral or to assert any rights relating to any Collateral. Notwithstanding the foregoing, however, a Secured Party may take action to preserve or enforce its rights against a Loan Party where a deadline or limitation period is applicable that would, absent such action, bar enforcement of Secured Obligations held by such Secured Party, including the filing of proofs of claim in an Insolvency Proceeding. No Lender shall set off against any account that is subject to a Control Agreement without the prior consent of Administrative Agent.

SECTION 10.05 Indemnification of Agent Indemnitees. EACH LENDER SHALL INDEMNIFY AND HOLD HARMLESS AGENT INDEMNITEES AND ISSUING BANK INDEMNITEES, TO THE EXTENT NOT REIMBURSED BY LOAN PARTIES, IN ACCORDANCE WITH ITS PRO RATA PERCENTAGE, AGAINST ALL CLAIMS THAT MAY BE INCURRED BY OR ASSERTED AGAINST ANY AGENT INDEMNITEE OR ISSUING BANK INDEMNITEE, PROVIDED THAT ANY CLAIM AGAINST AN AGENT INDEMNITEE RELATES TO OR ARISES FROM ITS ACTING AS OR FOR AN AGENT (IN THE CAPACITY AS AN AGENT). In no event shall any

Lender have any obligation thereunder to indemnify or hold harmless any Agent Indemnitee with respect to a Claim that is determined in a final, non-appealable judgment by a court of competent jurisdiction to result from the gross negligence or willful misconduct of such Indemnitee. In Administrative Agent's discretion, it may reserve for any Claims made against an Agent Indemnitee or Issuing Bank Indemnitee, and may satisfy any judgment, order or settlement relating thereto, from proceeds of Collateral prior to any Agent making any distribution of Collateral proceeds to Secured Parties. If any Agent is sued by any receiver, bankruptcy trustee, debtor-in-possession or other Person for any alleged preference or fraudulent transfer, then any monies paid by such Agent in settlement or satisfaction of such proceeding, together with all interest, costs and expenses (including attorneys' fees) incurred in the defense of same, shall be promptly reimbursed to such Agent by each Lender to the extent of its Pro Rata Percentage.

SECTION 10.06 Limitation on Responsibilities of Agents. No Agent shall be liable to any Secured Party for any action taken or omitted to be taken under the Loan Documents, except for losses directly and solely caused by such Agent's gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a non-appealable decision). No Agent assumes any responsibility for any failure or delay in performance or any breach by any Loan Party, Lender or other Secured Party of any obligations under the Loan Documents. No Agent makes to Secured Parties any express or implied warranty, representation or guarantee with respect to any Secured Obligations, Collateral, Loan Documents or Loan Party. No Agent Indemnitee shall be responsible to Secured Parties for any recitals, statements, information, representations or warranties contained in any Loan Documents; the execution, validity, genuineness, effectiveness or enforceability of any Loan Documents; the genuineness, enforceability, collectibility, value, sufficiency, location or existence of any Collateral, or the validity, extent, perfection or priority of any Lien therein; the validity, enforceability or collectibility of any Secured Obligations; or the assets, liabilities, financial condition, results of operations, business, creditworthiness or legal status of any Loan Party or Account Debtor. No Agent Indemnitee shall have any obligation to any Secured Party to ascertain or inquire into the existence of any Default or Event of Default, the observance or performance by any Loan Party of any terms of the Loan Documents, or the satisfaction of any conditions precedent contained in any Loan Documents. Neither Administrative Agent nor Collateral Agent shall be liable for any application of amounts made by it in good faith and, if any such application is subsequently determined to have been made in error, the sole recourse of any Secured Party or other Person to which such amount should have been made shall be to recover the amount from the Person that actually received it (and, if such amount was received by any Secured Party, such Secured Party hereby agrees to return it).

SECTION 10.07 Successor Agents and Co-Agents.

(a) Resignation; Successor Agent. Subject to the appointment and acceptance of a successor Agent as provided below, any Agent may resign at any time by giving at least 30 days written notice thereof to the other Agent, Lenders and Administrative Borrower. Upon receipt of

such notice, Required Lenders shall have the right to appoint a successor Agent which shall be (a) a Lender or an Affiliate of a Lender; or (b) if no Lender or Affiliate of a Lender is willing to accept such position, a commercial bank that is organized under the laws of the United States or any state or district thereof, has a combined capital surplus of at least \$200,000,000 and (provided no Default or Event of Default exists) is reasonably acceptable to Administrative Borrower. If no successor Agent is appointed prior to the effective date of the resignation of an Agent, then such Agent may appoint a successor agent from among Lenders or, if no Lender accepts such role, such Agent may appoint Required Lenders as successor agent. Upon acceptance by a successor Agent of an appointment to serve as an Agent hereunder, or upon appointment of Required Lenders as successor Agent, such successor Agent shall thereupon succeed to and become vested with all the powers and duties of the retiring Agent without further act, and the retiring Agent shall be discharged from its duties and obligations hereunder in its capacity as such Agent, but shall continue to have the benefits of the indemnification set forth in Sections 10.05 and 11.03. Notwithstanding any Agent's resignation, the provisions of this Section 10.07 shall continue in effect for its benefit with respect to any actions taken or omitted to be taken by it while Agent. Any successor to Wells Fargo by merger or acquisition of stock or this loan shall continue to be Administrative Agent and Collateral Agent hereunder without further act on the part of the parties hereto, unless such successor resigns as provided above.

(b) Co-Collateral Agent. It is the intent of the parties that there shall be no violation of any Applicable Law denying or restricting the right of financial institutions to transact business in any jurisdiction. If Collateral Agent believes that it may be limited in the exercise of any rights or remedies under the Loan Documents due to any Applicable Law, or for any other reason in its sole discretion, Collateral Agent (or the Lenders) may appoint an additional Person as a co-collateral agent. If Collateral Agent (or the Lenders) so appoints a co-collateral agent, each right and remedy intended to be available to Collateral Agent under the Loan Documents shall also be vested in such separate agent. Every covenant and obligation necessary to the exercise thereof by such agent shall run to and be enforceable by it as well as Collateral Agent. Secured Parties shall execute and deliver such documents as Collateral Agent deems appropriate to vest any rights or remedies in such agent. If any cocollateral agent shall die or dissolve, become incapable of acting, resign or be removed, then all the rights and remedies of such agent, to the extent permitted by Applicable Law, shall vest in and be exercised by Collateral Agent until appointment of a new agent. For the avoidance of doubt, French Collateral Agent shall be a co-collateral agent hereunder.

SECTION 10.08 Due Diligence and Non-Reliance. Each Lender acknowledges and

agrees that it has, independently and without reliance upon any Agent or any other Lenders, and based upon such documents, information and analyses as it has deemed appropriate, made its own credit analysis of each Loan Party and its own decision to enter into this Agreement and to fund Loans and participate in LC Obligations hereunder. Each Secured Party has made such inquiries as it feels necessary concerning the Loan Documents, Collateral and Loan Parties. Each Secured Party acknowledges and agrees that the other Secured Parties have made no representations or warranties concerning any Loan Party, any Collateral or the legality, validity, sufficiency or enforceability of any Loan Documents or Obligations. Each Secured Party will, independently and without reliance upon any other Secured Party, and based upon such financial statements, documents and information as it deems appropriate at the time, continue to make and rely upon its own credit decisions in making Loans and participating in LC Obligations, and in taking or refraining from any action under any Loan Documents. Except for notices, reports and other information expressly requested by a Lender or expressly required to be delivered to a Lender pursuant to Section 5.01 or Section 5.02, no Agent shall have any duty or responsibility to provide any Secured Party with any notices, reports or certificates furnished to such Agent by any Loan Party or any credit or other information concerning the affairs, financial condition, business or properties of any Loan Party (or any of its Affiliates) which may come into possession of any Agent or its Affiliates.

SECTION 10.09 Remittance of Payments and Collections.

(a) Remittances Generally. All payments by any Lender to any Agent shall be made by the time and on the day set forth in this Agreement, in immediately available funds. If no time for payment is specified or if payment is due on demand by an Agent and request for payment is made by such Agent by 11:00 a.m., New York time, on a Business Day, payment shall be made by Lender not later than 2:00 p.m., New York time, on such day, and if request is made after 11:00 a.m., New York time, then payment shall be made by 11:00 a.m., New York time, on the next Business Day. Payment by any Agent to any Secured Party shall be made by wire transfer, in the type of funds received by such Agent. Any such payment shall be subject to such Agent's right of offset for any amounts due from such payee under the Loan Documents.

(b) Failure to Pay. If any Secured Party fails to pay any amount when due by it to any Agent pursuant to the terms hereof, such amount shall bear interest from the due date until paid at the rate determined by such Agent as customary in the banking industry for interbank compensation. In no event shall Borrowers be entitled to receive credit for any interest paid by a Secured Party to any Agent, nor shall any Defaulting Lender be entitled to interest on any amounts held by any Agent pursuant to Section 2.14(f).

(c) Recovery of Payments. If any Agent pays any amount to a Secured Party in the expectation that a related payment will be received by such Agent from any Loan Party and such related payment is not received, then such Agent may recover such amount from each Secured Party that received it. If any Agent determines at any time that an amount received under any Loan Document must be returned to any Loan Party or paid to any other Person pursuant to Applicable Law or otherwise, then, notwithstanding any other term of any Loan Document, such Agent shall not be required to distribute such amount to any Lender. If any amounts received and applied by any Agent to any Secured Obligations are later required to be returned by such Agent pursuant to Applicable Law, each Lender shall pay to such Agent, on demand, such Lender's share (in accordance with its Pro Rata Percentage, where applicable) of the amounts required to be returned.

SECTION 10.10 Agent in its Individual Capacity. As a Lender, Wells Fargo shall have the same rights and remedies under the other Loan Documents as any other Lender, and the terms "Lenders," "Required Lenders" or any similar term shall include Wells Fargo in its capacity as a Lender. Each of Wells Fargo and its Affiliates may accept deposits from, maintain deposits or credit balances for, invest in, lend money to, provide Bank Products to, act as trustee under indentures of, serve as financial or other advisor to, and generally engage in any kind of business with, Loan Parties and their Affiliates, as if Wells Fargo were any other bank, without any duty to account therefor (including any fees or other consideration

received in connection therewith) to the other Lenders. In their individual capacity, Wells Fargo and its Affiliates may receive information regarding Loan Parties, their Affiliates and their Account Debtors (including information subject to confidentiality obligations), and each Secured Party agrees that Wells Fargo and its Affiliates shall be under no obligation to provide such information to any Secured Party, if acquired in such individual capacity and not as an Agent hereunder.

SECTION 10.11 Agent Titles. Each Lender, other than Wells Fargo, that is designated (on the cover page of this Agreement or otherwise) by Wells Fargo as an “Agent” or “Arranger” of any type shall not have any right, power, responsibility or duty under any Loan Documents other than those applicable to all Lenders, and shall in no event be deemed to have any fiduciary relationship with any other Lender.

SECTION 10.12 Bank Product Providers. Each Secured Bank Product Provider, by delivery of a notice to Administrative Agent of a Bank Product, agrees to be bound by Section 8.03, ARTICLES VII, X and XI, and the Intercreditor Agreement, and following such agreement, such Secured Bank Product Provider in its capacity as such shall be deemed a third party beneficiary hereof and of the provisions of the other Loan Documents for purposes of any reference in a Loan Document to the parties for whom the Agents are acting. Each Secured Bank Product Provider shall indemnify and hold harmless Agent Indemnitees, to the extent not reimbursed by Loan Parties, against all Claims that may be incurred by or asserted against any Agent Indemnitee in connection with such provider’s Secured Bank Product Obligations. Each Agent hereby agrees to act as agent for such Secured Bank Product Providers and, by virtue of entering into a Bank Product Agreement, the applicable Secured Bank Product Provider shall be automatically deemed to have appointed each Agent as its agent and to have accepted the benefits of the Loan Documents. It is understood and agreed that the rights and benefits of each Secured Bank Product Provider under the Loan Documents consist exclusively of such Secured Bank Product Provider’s being a beneficiary of the Liens and security interests (and, if applicable, guarantees) granted to the Agents and the right to share in payments and collections out of the Collateral as more fully set forth in this Agreement. In addition, each Secured Bank Product Provider, by virtue of entering into a Bank Product Agreement, shall be automatically deemed to have agreed that each Agent shall have the right, but shall have no obligation, to establish, maintain, relax, or release reserves in respect of the Secured Bank Product Obligations and that if reserves are established there is no obligation on the part of any Agent to determine or insure whether the amount of any such reserve is appropriate or not. In connection with any such distribution of payments or proceeds of Collateral, each Agent shall be entitled to assume no amounts are due or owing to any Secured Bank Product Provider unless such Secured Bank Product Provider has provided a written certification (setting forth a reasonably detailed calculation) to such Agent as to the amounts that are due and owing to it and such written certification is received by such Agent a reasonable period of time prior to the making of such distribution. Each Agent shall have no obligation to calculate the amount due and payable with respect to any Bank Products or any Bank Product Debt, but may rely upon the written certification of the amount due and payable from the applicable Secured Bank Product Provider. In the absence of an updated certification, each Agent shall be entitled to assume that the amount due and payable to the applicable Secured Bank Product Provider is the amount last certified to such Agent by such Secured Bank Product Provider as being due and payable (less any distributions made to such Secured Bank Product Provider on account thereof). Borrowers may obtain Bank Products from any Secured Bank Product Provider, although Borrowers are not required to do so. Each Borrower acknowledges and agrees that no Secured Bank Product Provider has committed to provide any Bank Products and that the providing of Bank Products by any Secured Bank Product Provider is in the sole and absolute discretion of such Secured Bank Product Provider. Notwithstanding anything to the contrary in this Agreement or any other Loan Document, except as provided in Section 11.02(b)(v), no provider or holder of any Bank Product shall have any voting or approval rights hereunder (or be deemed a Lender) solely by virtue of its status as the provider or holder of such agreements or products or the Secured Obligations owing thereunder, nor shall the consent of any such provider or holder be required (other than in their capacities as Agents, Lenders or Issuing Banks, to the extent applicable) for any matter hereunder or under any of the other Loan Documents, including as to any matter relating to the Collateral or the release of Collateral or Guarantors.

SECTION 10.13 No Third Party Beneficiaries. This ARTICLE X is an agreement solely among Secured Parties and Agents, and shall survive Full Payment of the Secured Obligations. This ARTICLE X does not confer any rights or benefits upon the Loan Parties or any other Person. As between the Loan Parties and Agents, any action that any Agent may take under any Loan Documents or with respect to any Secured Obligations shall be conclusively presumed to have been authorized and directed by Secured Parties.

SECTION 10.14 Release. Each Lender and each Issuer hereby releases each Agent acting on its behalf pursuant to the terms of this Agreement or any other Loan Document from the restrictions of Section 181 of the German Civil Code (*Bürgerliches Gesetzbuch*) (restriction on self-dealing).

SECTION 10.15 Acknowledgment of Security Trust Deed. Each Secured Party acknowledges the terms of the Security Trust Deed and, in particular, the terms, basis and limitation on which the Collateral Agent holds the “Transaction Security” (as defined therein) and specifically agrees and accepts (i) such terms, basis and limitation; (ii) that the Collateral Agent shall, as trustee, have only those duties, obligations and responsibilities expressly specified in the Security Trust Deed; (iii) the limitation and exclusion of the Collateral Agent’s liability as set out therein; and (iv) all other provisions of the Security Trust Deed as if it were a party thereto.

SECTION 10.16 ERISA Representation.

(a) Each Lender (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, each Agent, each Arranger, and each of their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of any Borrower or any other Loan Party, that at least one of the following is and will be true:

(i) such Lender is not using “plan assets” (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments,

(ii) the transaction exemption set forth in one or more PTEs, such as PTE 8414 (a class exemption for certain transactions determined by independent qualified professional asset managers), PTE 95-60 (a class exemption for certain transactions involving insurance company general accounts), PTE 90-1 (a class exemption for certain transactions involving insurance company pooled separate accounts), PTE 91-38 (a class exemption for certain transactions involving bank collective investment funds) or PTE 96-23 (a class exemption for certain transactions determined by in-house asset managers), is applicable with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement,

(iii) (A) such Lender is an investment fund managed by a “Qualified Professional Asset Manager” (within the meaning of Part VI of PTE 84-14), (B) such Qualified Professional Asset Manager made the investment decision on behalf of such Lender to enter into, participate in, administer and perform the Loans, the Letters of Credit, the Commitments and this Agreement, (C) the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement satisfies the requirements of sub-sections (b) through (g) of Part I of PTE 84-14 and (D) to the best knowledge of such Lender, the requirements of subsection (a) of Part I of PTE 84-14 are satisfied with respect to such Lender’s entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement, or

(iv) such other representation, warranty and covenant as may be agreed in writing between the Administrative Agent, in its sole discretion, and such Lender.

(b) In addition, unless sub-clause (i) in the immediately preceding clause (a) is true with respect to a Lender or such Lender has not provided another representation, warranty and covenant as provided in sub-clause (iv) in the immediately preceding clause (a), such Lender further (x) represents and warrants, as of the date such Person became a Lender party hereto, to, and (y) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, each Agent, each Arranger, and each of their respective Affiliates, and not, for the avoidance of doubt, to or for the benefit of any Borrower or any other Loan Party, that:

(i) neither any Agent, any Arranger, nor any of their respective Affiliates is a fiduciary with respect to the assets of such Lender (including in connection with the reservation or exercise of any rights by any Agent under this Agreement, any Loan Document or any documents related to hereto or thereto),

(ii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is independent (within the meaning of 29 CFR § 2510.3-21) and is a bank, an insurance carrier, an investment adviser, a broker-dealer or other person that holds, or has under management or control, total assets of at least \$50,000,000, in each case as described in 29 CFR § 2510.3-21(c)(1)(i)(A)-(E),

(iii) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is capable of evaluating investment risks independently, both in general and with regard to particular transactions and investment strategies (including in respect of the Secured Obligations),

(iv) the Person making the investment decision on behalf of such Lender with respect to the entrance into, participation in, administration of and performance of the Loans, the Letters of Credit, the Commitments and this Agreement is a fiduciary under ERISA or the Code,

or both, with respect to the Loans, the Letters of Credit, the Commitments and this Agreement and is responsible for exercising independent judgment in evaluating the transactions hereunder, and

(v) no fee or other compensation is being paid directly to any Agent, any Arranger, or any of their respective Affiliates for investment advice (as opposed to other services) in connection with the Loans, the Letters of Credit, the Commitments or this Agreement.

(c) Each Agent and each Arranger hereby informs the Lenders that each such Person is not undertaking to provide impartial investment advice, or to give advice in a fiduciary capacity, in connection with the transactions contemplated hereby, and that such Person has a financial interest in the transactions contemplated hereby in that such Person or an Affiliate thereof (i) may receive interest or other payments with respect to the Loans, the Letters of Credit, the Commitments and this Agreement, (ii) may recognize a gain if it extended the Loans, the Letters of Credit or the Commitments for an amount less than the amount being paid for an interest in the Loans, the Letters of Credit or the Commitments by such Lender or (iii) may receive fees or other payments in connection with the transactions contemplated hereby, the Loan Documents or otherwise, including structuring fees, commitment fees, arrangement fees, facility fees, upfront fees, underwriting fees, ticking fees, agency fees, administrative agent or collateral agent fees, utilization fees, minimum usage fees, letter of credit fees, fronting fees, deal-

away or alternate transaction fees, amendment fees, processing fees, term out premiums, banker's acceptance fees, breakage or other early termination fees or fees similar to the foregoing.

ARTICLE XI
MISCELLANEOUS

SECTION 11.01 Notices.

(a) Generally. Except in the case of notices and other communications expressly permitted to be given by telephone (and except as provided in paragraph (b) below), all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by telecopier as follows:

- (i) if to any Loan Party, to Administrative Borrower at:

Novelis Inc.
Two Alliance Center
3560 Lenox Road, Suite 2000
Atlanta, GA 30326
Attention: Randal P. Miller
Telecopier No.: 404-760-0124
Email: randy.miller@novelis.com

with a copy to:

Novelis Inc.
Two Alliance Center
3560 Lenox Road, Suite 2000
Atlanta, GA 30326
Attention: Leslie J. Parrette, Jr.
Telecopier No.: 404-760-0137
Email: les.parrette@novelis.com and with a copy to:

Torys LLP
1114 Avenue of the Americas, 23rd Floor
New York, New York 10036
Attention: Jonathan Wiener
Telecopier No.: 212-880-6121 Email: jwiener@torys.com

- (ii) if to the Administrative Agent or the Collateral Agent, to it at:

Wells Fargo Bank, National Association
1100 Abernathy Road, Suite 1600
Atlanta, GA 30328
Attention: Daniel Denton
Telecopier No.: 855-277-7303 Phone No.: 770-508-1387 with a copy to:

Skadden, Arps, Slate, Meagher & Flom LLP
155 North Wacker Drive, Suite 3000
Chicago, IL 60606
Attention: Seth E. Jacobson
Telecopier No.: (312) 407-8511 Phone No.: (312) 407-0889

and with a copy to (for notices relating to European Borrowers and Borrowings thereby):

Burdale Financial Limited
5th Floor, No.1 Bread Street
London, EC4M 9BE
Attention: Tania Saldanha
Telecopier No.: 00 1 845 641 8888 (International); 0845 641 8888 (UK) Phone No.: +44 (0) 207 664 5673

- (iii) if to the U.S. Swingline Lender, to it at:

Wells Fargo Bank, National Association
1100 Abernathy Road, Suite 1600

Atlanta, GA 30328
Attention: Daniel Denton
Telecopier No.: 855-277-7303 Phone No.: 770-508-1387 with a copy to:

Skadden, Arps, Slate, Meagher & Flom LLP
155 North Wacker Drive, Suite 3000
Chicago, IL 60606
Attention: Seth E. Jacobson
Telecopier No.: (312) 407-8511
Phone No.: (312) 407-0889

- (iv) ~~if to the Initial Issuing Bank, to it at:~~ [\[reserved\];](#)

~~Wells Fargo Bank, National Association
1100 Abernathy Road, Suite 1600
Atlanta, GA 30328
Attention: Daniel Denton~~

~~Telecopier No.: 855-277-7303 Phone No.: 770-508-1387 with a copy to:~~

~~Skadden, Arps, Slate, Meagher & Flom LLP
155 North Wacker Drive, Suite 3000
Chicago, IL 60606
Attention: Seth E. Jacobson~~

~~Telecopier No.: (312) 407-8511 Phone No.: (312) 407-0889 and with a copy to (for notices relating to European Letters of Credit):~~

~~Burdale Financial Limited
5th Floor, No.1 Bread Street
London, EC4M 9BE
Attention: Tania Saldanha~~

~~Telecopier No.: 00 1 845 641 8888 (International); 0845 641 8888 (UK) Phone No.: +44 (0) 207 664 5673~~

- (v) if to the European Swingline Lender, to it ~~at~~ [care of](#):

Wells Fargo Bank, National Association
1100 Abernathy Road, Suite 1600
Atlanta, GA 30328
Attention: Daniel Denton
Telecopier No.: 855-277-7303 Phone No.: 770-508-1387 with a copy to:

Skadden, Arps, Slate, Meagher & Flom LLP
155 North Wacker Drive, Suite 3000
Chicago, IL 60606
Attention: Seth E. Jacobson

Telecopier No.: (312) 407-8511 Phone No.: (312) 407-0889 and with a copy to:

Burdale Financial Limited
5th Floor, No.1 Bread Street
London, EC4M 9BE
Attention: Tania Saldanha

Telecopier No.: 00 1 845 641 8888 (International); 0845 641 8888 (UK) Phone No.: +44 (0) 207 664 5673

- (vi) if to a Lender (or other Issuing Bank), to it at its address (or telecopier number) set forth in its Administrative Questionnaire.

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by telecopier shall be deemed to have been given when sent (except that, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next Business Day for the recipient). Notices delivered through electronic communications to the extent provided in paragraph (b) below, shall be effective as provided in said paragraph (b).

(b) Electronic Communications. Notices and other communications to the Lenders and the Issuing Banks hereunder may (subject to Section 11.01(d)) be delivered or furnished by electronic communication (including e-mail and Internet or intranet websites) pursuant to procedures approved by the Administrative Agent; provided that the foregoing shall not apply to notices to any Lender or Issuing Bank pursuant to ARTICLE II if such Lender or Issuing Bank, as applicable, has notified the Administrative Agent that it is incapable of receiving notices

under such Article by electronic communication. The Administrative Agent, the Collateral Agent or Administrative Borrower may, in its discretion, agree to accept notices and other communications to it hereunder by electronic communications pursuant to procedures approved by it (including as set forth in Section 11.01(d)); provided that approval of such procedures may be limited to particular notices or communications.

Unless the Administrative Agent otherwise prescribes, (i) notices and other communications sent to an e-mail address shall be deemed received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement); provided that if such notice or other communication is not sent during the normal business hours of the recipient, such notice or communication shall be deemed to have been sent at the opening of business on the next business day for the recipient, and (ii) notices or communications posted to an Internet or intranet website shall be deemed received upon the deemed receipt by the intended recipient at its e-mail address as described in the foregoing clause (i) of notification that such notice or communication is available and identifying the website address therefor.

(c) Change of Address, Etc. Any party hereto may change its address or telecopier number for notices and other communications hereunder by notice to the other parties hereto.

(d) Posting. Each Loan Party hereby agrees that it will provide to the Administrative Agent all information, documents and other materials that it is obligated to furnish to the Administrative Agent pursuant to this Agreement and any other Loan Document, including all notices, requests, financial statements, financial and other reports, certificates and other information materials, but excluding any such communication that (i) relates to a request for a new, or a conversion of an existing, Borrowing or other extension of credit (including any election of an interest rate or interest period relating thereto), (ii) relates to the payment of any principal or other amount due under this Agreement prior to the scheduled date therefor, (iii) provides notice of any Default under this Agreement or (iv) is required to be delivered to satisfy any condition precedent to the effectiveness of this Agreement and/or any borrowing or other extension of credit hereunder (all such nonexcluded communications, collectively, the "**Communications**"), by transmitting the Communications in an electronic/soft medium in a format reasonably acceptable to the Administrative Agent at daniel.denton@wellsfargo.com or at such other e-mail address(es) provided to Administrative Borrower from time to time or in such other form, including hard copy delivery thereof, as the Administrative Agent shall reasonably require. Nothing in this Section 11.01(d) shall prejudice the right of the Agents, any Lender or any Loan Party to give any notice or other communication pursuant to this Agreement or any other Loan Document in any other manner specified in this Agreement or any other Loan Document.

To the extent consented to by the Administrative Agent from time to time, Administrative Agent agrees that receipt of the Communications by the Administrative Agent at its e-mail address(es) set forth above shall constitute effective delivery of the Communications to the Administrative Agent for purposes of the Loan Documents; provided that Administrative Borrower shall also deliver to the Administrative Agent an executed original of each Compliance Certificate and an executed copy (which may be by pdf or similar electronic transmission) of each notice or request of the type described in clauses (i) through (iv) of paragraph (d) above required to be delivered hereunder.

Each Loan Party **further** agrees that Administrative Agent [and Collateral Agent](#) may make the Communications available to the Lenders by posting the Communications on Intralinks, [SyndTrak](#) or a substantially similar [secure](#) electronic transmission system (the "**Platform**"). **THE PLATFORM IS PROVIDED "AS IS" AND "AS AVAILABLE." THE AGENTS DO NOT WARRANT THE ACCURACY OR COMPLETENESS OF THE COMMUNICATIONS, OR THE ADEQUACY OF THE PLATFORM AND EXPRESSLY DISCLAIM LIABILITY FOR ERRORS OR OMISSIONS IN THE COMMUNICATIONS. NO WARRANTY OF ANY KIND, EXPRESS, IMPLIED OR STATUTORY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, NON-INFRINGEMENT OF THIRD PARTY RIGHTS OR FREEDOM FROM VIRUSES OR OTHER CODE DEFECTS, IS MADE BY ANY AGENT IN CONNECTION WITH THE COMMUNICATIONS OR THE PLATFORM.** In no event shall any Agent or any of its Related Parties have any liability to the Loan Parties, any Lender, [any Issuing Bank](#) or any other person for damages of any kind, including direct or indirect, special, incidental or consequential damages, losses or expenses (whether in tort, contract or otherwise) arising out of any Loan Party's or any Agent's transmission of communications through the Internet, except to the extent the liability of such person is found in a final non-appealable judgment by a court of competent jurisdiction to have resulted from such person's gross negligence or willful misconduct.

SECTION 11.02 Waivers; Amendment.

(a) Generally. No failure or delay by any Agent, any Issuing Bank or any Lender in exercising any right or power hereunder or under any other Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of each Agent, the Issuing Banks and the Lenders hereunder and under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of any Loan Document or consent to any departure by any Loan Party therefrom shall in any event be effective unless the same shall be permitted by this Section 11.02, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit shall not be construed as a waiver of any Default, regardless of whether any Agent, any Lender or any Issuing Bank may have had notice or knowledge of such Default at the time. No notice or demand on any Loan Party in any case shall entitle any Loan Party to any other or further notice or demand in similar or other circumstances.

(b) Required Consents. Subject to the terms of the Intercreditor Agreement and to Sections 11.02(c) through (k), Section 2.11, Section 2.23 and the definitions of “Permitted Customer Account Financing”, “Permitted German Alternative Financing”, “Permitted Novelis Switzerland Financing” and “Permitted Holdings Amalgamation”, no modification of any Loan Document, including any extension or amendment of a Loan Document or any waiver of a Default or Event of Default, shall be effective without the prior written agreement of Administrative Agent (or Collateral Agent, in the case of any Security Document) with the consent of Required Lenders, and each Loan Party party to such Loan Document; provided, however, that

(i) no modification shall be effective with respect to any provision in a Loan Document that relates to any rights, duties or discretion of any Agent, without the prior written consent of such Agent;

(ii) without the prior written consent of such Issuing Bank, no modification shall be effective with respect to any LC Obligations, Section 2.18 or any other provision in a Loan Document that relates to any rights, duties or discretion of an Issuing Bank;

(iii) without the prior written consent of each affected Lender, no modification shall be effective that would (i) increase the Commitment of such Lender; (ii) reduce the amount or rate of, or waive or delay payment of, any principal, interest or fees payable to such Lender; (provided that no amendment entered into pursuant to the terms of Section 2.11 shall constitute a reduction, of the amount or rate of, or a waiver or delay of the payment of, any interest or fees for purposes hereof); (iii) extend the Maturity Date or (iv) extend the expiration date of any Letter of Credit beyond the Letter of Credit Expiration Date (as such term is defined as of the Amendment No. 42 Effective Date), it being agreed that any extension of the expiration date of any Letter of Credit beyond the date that is 10 Business Days prior to the Maturity Date shall not constitute an extension for purposes of this clause (iv) if (x) such Letter of Credit is cash collateralized by the Designated Company pursuant to Section 2.18(c) and (y) on and after the Maturity Date, such Lender no longer has any obligations under Section 2.18 or otherwise under the Loan Documents in respect of such Letter of Credit that is so extended);

(iv) without the prior written consent of all Lenders (except a Defaulting Lender to the extent provided in Section 2.14(f)), no modification shall be effective that would (i) alter Section 8.03, 11.02 or the pro rata provisions of Section 2.14(b), or any provision that expressly requires the consent of all Lenders or each affected Lender; (ii) except as provided in Section 11.02(h) ~~or~~, (i) or (l), amend the definition of Borrowing Base (or any defined term used in such definition) (in each case in a manner that would increase availability), Pro Rata Percentage or Required Lenders; (iii) increase any advance rate; (iv) release all or substantially all of the Collateral, except as currently contemplated by the Loan Documents; (v) except as expressly permitted by the Loan Documents, release any Loan Party from liability for any Obligations, if such Loan Party is not “insolvent” (as such term is defined under the applicable Debtor Relief Laws of the jurisdiction in which such Loan Party is organized or incorporated) at the time of the release, (vi) permit or require mortgages or other security over Real Property located in the United States, or otherwise amend the definitions of Excluded Property or Collateral to include Real Property located in the United States, in each case under this clause (vi) to secure any or all of the Secured Obligations or (vii) except pursuant to the Intercreditor Agreement, release Holdings or all or substantially all of the Subsidiary Guarantors from their Guarantees (except as provided in this Agreement (including, without limitation, Section 7.09) or as otherwise expressly provided by any such Guarantee), or limit their liability in respect of such Guarantees;

(v) without the prior written consent of a Secured Bank Product Provider, no modification shall be effective that affects its relative payment priority under Section 8.03; and

(vi) without the written consent of each relevant Swingline Lender, no modification shall be effective that would change or waive any provision hereof relating to Swingline Loans (including the definition of “European Swingline Commitment”)

provided further, that, notwithstanding anything to the contrary contained herein, each Agent is hereby authorized by each Lender to enter into any amendment to or modification of the Intercreditor Agreement or the Security Documents in connection with the issuance or incurrence of Pari Passu Secured Obligations or Subordinated Lien Secured Obligations, solely to the extent necessary to effect such amendments as may be necessary or appropriate, in the reasonable opinion of such Agent, in connection with any such issuance or incurrence expressly permitted hereunder, so long as such amendment or modification does not adversely affect the rights of any Lender (it being understood that allowing Pari Passu Secured Obligations and Subordinated Lien Secured Obligations to be secured by Collateral on the terms set forth in the Intercreditor Agreement will not be deemed to adversely affect the rights of any Lender).

(c) Collateral. Without the consent of any other person, the applicable Loan Party or Parties and the Administrative Agent and/or Collateral Agent may (in its or their respective sole discretion, or shall, to the extent required by any Loan Document) enter into any amendment or waiver of any Loan Document, or enter into any new agreement or instrument, to (i) effect the granting, perfection, protection, expansion or enhancement of any security interest in any Collateral or additional property to become Collateral for the benefit of the Secured Parties, (ii) as required by local law to give effect to, or protect any security interest for the benefit of the Secured Parties, in any property or so that the security interests therein comply with Applicable Law, or (iii) to cure any inconsistency with this Agreement (other than, solely in the case of clause (iii), amendments or waivers to provisions in such Security Documents that are required to create or perfect the security interests created thereby or cause such Security Document or security interest to be enforceable).

(d) Dissenting Lenders. If a Lender fails to give its consent to any amendment, waiver or action for which consent of all Lenders was required and Required Lenders have consented, then, in addition to any other rights and remedies that any Person may have, Administrative

Agent may, by notice to such Lender within 120 days after such event, require such Lender to assign all of its rights and obligations under the Loan Documents to Eligible Assignee(s) specified by Administrative Agent, pursuant to appropriate Assignment and Assumption(s) and within 20 days after Administrative Agent's notice. Administrative Agent is irrevocably appointed as attorney-in-fact to execute any such Assignment and Assumption if the Lender fails to execute same. Such Lender shall be entitled to receive, in cash, concurrently with such assignment, all amounts owed to it under the Loan Documents, including all principal, interest and fees through the date of assignment (including any amount payable pursuant to Section 2.13).

(e) Holdings Amalgamation and Increased Commitments. Notwithstanding the foregoing, the Administrative Agent and the Borrowers (without the consent of any Lenders) may amend or amend and restate this Agreement and the other Loan Documents if necessary or advisable in connection with or to effectuate (i) the Permitted Holdings Amalgamation and (ii) any increase in Commitments contemplated by Section 2.23.

(f) Limitations. The agreement of any Loan Party shall not be necessary to the effectiveness of any modification of a Loan Document that deals solely with the rights and duties of any Lender, any Agent and/or any Issuing Bank as among themselves. Only the consent of the parties to the Fee Letter or any agreement relating to a Bank Product shall be required for any modification of such agreement, and any non-Lender that is party to a Bank Product agreement shall have no right to participate in any manner in modification of any other Loan Document. Any waiver or consent granted by Agents or Lenders hereunder shall be effective only if in writing and only for the matter specified.

(g) Loan Modification Offers.

(i) The Administrative Borrower may, by written notice to the Administrative Agent, make one or more offers (a "**Loan Modification Offer**") to all Lenders to make no more than one Permitted Amendment (as defined below) pursuant to procedures reasonably specified by the Administrative Agent and reasonably acceptable to the applicable Borrowers. Such notice shall set forth (i) the terms and conditions of the requested Permitted Amendment and (ii) the date on which such Permitted Amendment is requested to become effective (which shall not be less than 10 Business Days nor more than 30 Business Days after the date of such notice) (or such shorter periods as are acceptable to the Administrative Agent). Permitted Amendments shall become effective only with respect to the Loans of Lenders that accept the applicable Loan Modification Offer (such Lenders, the "**Accepting Lenders**").

(ii) The Borrowers, each Accepting Lender, each Issuing Bank and each Swingline Lender shall execute and deliver to the Administrative Agent a loan modification agreement in a form acceptable to the Administrative Agent (a "**Loan Modification Agreement**") and such other documentation as the Administrative Agent shall reasonably specify to evidence the acceptance of the Permitted Amendment and the terms and conditions thereof. The Administrative Agent shall promptly notify each Lender, each Issuing Bank and each Swingline Lender as to the effectiveness of such Loan Modification Agreement. Each of the parties hereto hereby agrees that, upon the effectiveness of the Loan Modification Agreement, this Agreement shall be deemed amended to the extent (but only to the extent) necessary to reflect the existence and terms of the Permitted Amendment evidenced thereby and only with respect to the Loans and Commitments of the Accepting Lenders (such Commitments, the "**Extended Commitments**"). Notwithstanding the foregoing, the Permitted Amendment shall not become effective under this Section 11.02 unless the Administrative Agent, to the extent so reasonably requested by the Administrative Agent, shall have received corporate documents, officers' certificates or legal opinions consistent with those delivered on the Closing Date under Section 4.01.

(iii) "**Permitted Amendment**" shall mean (A) an extension of the final maturity date of the applicable Commitments of the Accepting Lenders; provided that such extension may not result in having more than two different maturity dates under this Agreement; provided further, that subject to any amendments to Sections 2.17 and 2.18 or otherwise to the extent dealing with Letters of Credit and Swingline Loans which mature or expire after a maturity date when there exist Extended Commitments with a longer maturity date (which may, with the consent of the applicable Swingline Lender or Issuing Bank, provide that participations in Letters of Credit expiring on or after the Maturity Date then in effect shall be re-allocated on the Maturity Date from existing Lenders to Accepting Lenders), all Letters of Credit and Swingline Loans shall be participated in on a pro rata basis by all Lenders with Commitments in accordance with their Pro Rata Percentage and all borrowings under the Commitments and repayments thereunder shall be made on a pro rata basis (except for (1) payments of interest and fees at different rates on Extended Commitments (and related outstandings) and (2) repayments required upon the maturity date of the non-extending Commitments), and (B) any other amendment to a Loan Document required to give effect to the Permitted Amendments described in clause (A) of this Section 11.02(g). This Section 11.02(g) shall supersede any provisions in Section 2.14 or Section 11.02 to the contrary.

(h) Certain Borrowing Base Additions. The Administrative Borrower may request that (i) Accounts of one or more Borrowers or Borrowing Base Guarantors that would otherwise not be Eligible Accounts solely because the Account Debtor either (A) maintains its Chief Executive Office in a specific jurisdiction that is not an Applicable Eligible Jurisdiction, or (B) is organized under the laws of a specific jurisdiction that is not an Applicable Eligible Jurisdiction or any state, territory, province or subdivision thereof, be treated as Eligible Accounts, or (ii) Accounts sold in a true sale by a Restricted Subsidiary to a Borrower or Borrowing Base Guarantor (~~other than including~~ pursuant to any Receivables Purchase Agreement ~~that is in effect on the Closing Date~~ entered into after the Amendment No. 2 Effective Date, but excluding the Initial German Receivables Purchase Agreement) be able to be treated as Eligible Accounts of such Borrower or Borrowing Base Guarantor (subject to meeting applicable eligibility criteria), and in each case the Lenders hereby agree that the eligibility criteria may be adjusted to treat such Accounts as eligible accounts so long as (i) with regard to Accounts constituting in the aggregate less than 10% of the Total Borrowing Base, the Administrative Agent so agrees in its sole discretion, and (ii) with regard to Accounts constituting in the aggregate 10% or more (but less than 25%) of the Total Borrowing Base, the Required Lenders so agree (provided that such an adjustment with regard to a greater portion of the Total Borrowing Base may be made only with the prior written consent of all Lenders (except a Defaulting Lender as provided in Section

2.14(f)); provided, however, that prior to any such Account being treated as eligible (or, in the case of a German Borrower (other than Novelis Deutschland) or a Swiss Borrower (other than Novelis AG or the Surviving Swiss Borrower), eligible under a Borrowing Base of another German Borrower or Swiss Borrower), (y) the Administrative Borrower shall, at Borrowers' expense, execute, acknowledge and deliver, or cause the execution, acknowledgment and delivery of, and thereafter register, file or record, or cause to be registered, filed or recorded, in an appropriate governmental office, any security agreement, guaranty, or other agreement, document or instrument supplemental to or confirmatory of the Security Documents or other Loan Documents, together with such certificates, legal opinions, and other deliverables as may be requested by the Administrative Agent in its sole discretion, and (z) such Account shall meet such additional eligibility criteria and/or be subject to such lower advance rates as the Administrative Agent may establish in its sole discretion, including requiring legal opinions from both the jurisdiction in which the applicable account is originated and the jurisdiction of the account debtor, satisfaction of any requirements to notify account debtors in a manner deemed necessary and desirable, requiring periodic scheduling of accounts subject to pledge or other actions reasonably necessary to identify Accounts subject to a pledge, and a field examination with respect to such Accounts (provided that, if such Accounts are already Eligible Accounts under an existing Borrowing Base, the requirement to obtain a field examination with respect to such Accounts shall be in the sole discretion of the Administrative Agent) (which field examination shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document). In addition, the Administrative Agent and the Collateral Agent may enter into the agreements and documents referred to in the definition of "Eligible Swiss ~~Subsidiary~~Purchased Accounts" and otherwise effect the arrangements contemplated hereby with regard to such Accounts.

(i) Additional Addition of Novelis Switzerland as a Swiss Borrower. Notwithstanding the foregoing, to the extent that Novelis AG and Novelis Switzerland have not merged with and into one another, the Administrative Borrower may request that Novelis Switzerland be able to be treated as an additional Swiss Borrower hereunder, and its Accounts be able to become eligible for inclusion in a ~~new~~ Swiss borrowing base Borrowing Base applicable to Novelis Switzerland (separate from ~~the each other~~ Swiss Borrowing Base) without being purchased pursuant to a ~~Swiss~~ Receivables Purchase Agreement (and so long as Novelis Switzerland is not a party to any Receivables Purchase Agreement in the capacity of a seller thereunder), and in each case the Lenders hereby agree that, notwithstanding the foregoing, the Administrative Agent (and/or the Collateral Agent, as applicable) may amend ~~the Credit~~ this Agreement and the other Loan Documents (including adjustment of the eligibility criteria ~~may be adjusted~~ to treat such Accounts as eligible accounts) without the consent of any other Lender to effect such request; provided, however, that, to the extent that Novelis AG and Novelis Switzerland have not merged with and into one another, prior to ~~any such Swiss Subsidiary~~ Novelis Switzerland being treated as an additional Swiss Borrower hereunder, or any such Account being treated as eligible under the Swiss Borrowing Base of Novelis Switzerland, (x) the Loan Parties shall, at Borrowers' expense, meet such other conditions precedent and eligibility criteria as may be established by the Administrative Agent in its sole discretion, which may include any item referred to in clauses (y) and (z) of Section

11.02(h), and to the extent requested by any Lender, the condition precedent in Section 4.016(kf) of Amendment No. 2, (y) the Loan Parties shall, at Borrowers' expense, execute, acknowledge and deliver, or cause the execution, acknowledgment and delivery of, and thereafter register, file or record, or cause to be registered, filed or recorded, in an appropriate governmental office, such documentation as the Administrative Agent may request (including any security agreement, guaranty, or other agreement, document or instrument supplemental to or confirmatory of this Agreement, the Security Documents or the other Loan Documents, together with such certificates, legal opinions, and other deliverables) in its sole discretion and (z) such Account shall meet such eligibility criteria and advance rates as the Administrative Agent may establish in its sole discretion, including requiring legal opinions from both the jurisdiction in which the applicable account is originated and the jurisdiction of the account debtor, satisfaction of any requirements to notify account debtors in a manner deemed necessary and desirable, requiring periodic scheduling of accounts subject to pledge or other actions reasonably necessary to identify Accounts subject to a pledge, and a field examination with respect to such Accounts (which field examination and inventory appraisal shall be at the sole expense of the Loan Parties and shall not count against any limitations on reimbursement set forth herein or in any other Loan Document).

(j) Intercreditor Agreement. Notwithstanding the foregoing, the Administrative Agent and the Collateral Agent (without the consent of any Lenders) may, in their sole discretion, amend or amend and restate the Intercreditor Agreement and the other Loan Documents, any such amendment to be acceptable in form and substance to the Administrative Agent and the Collateral Agent in their sole discretion, if necessary or advisable in connection with or to effectuate (x) any treatment of intercompany loans for working capital as Revolving Credit Priority Collateral or (y) each step of the Permitted Reorganization or to conform defined terms in the Intercreditor Agreement to defined terms in, and Secured Obligations under, this Agreement. Each Loan Party agrees (i) to cooperate (consistent with the terms of Section 5.12) in the execution of any such amendment to the Intercreditor Agreement to the extent agreed between the Agents, the Term Loan Administrative Agent, the Term Loan Collateral Agent, and the other agents and representatives required to pursuant to Section 11.3 of the Intercreditor Agreement, including in executing any such amendment to the extent execution by any Loan Party is required by such section and (ii) to take such other actions or execute such other documents (consistent with the terms of Section 5.12) as may be reasonably requested by the Administrative Agent or the Collateral Agent in connection with or to effectuate any such amendment to the Intercreditor Agreement.

(k) Certain Term Loan Definitions. In the event that (i) the definition of "Pro Forma Basis (Leverage)", the definition of "Consolidated EBITDA (Leverage)", the definition of "Consolidated Net Income (Leverage)", the definition of "Consolidated Net Tangible Assets" or the definition of "Specified Transaction", or (ii) solely to the extent applicable to such definitions, any defined terms referenced in any such definition (in each case as contained in the Term Loan Credit Agreement, or in any successor agreement with respect to Term Loan Credit Agreement Refinancing Indebtedness) is amended, the Administrative Borrower shall provide prompt notice to the Administrative Agent of such amendment, and the definitions of each such term contained herein shall be deemed amended, *mutatis mutandis*, to conform to such amended definitions, and each party hereto authorizes the Administrative Agent and the Borrowers (without the consent of any other Person) to amend or amend and restate this Agreement to reflect such amendment.

(l) Additional Eligibility Criteria in Respect of Certain Aleris Borrowers. Notwithstanding anything to the contrary in this Agreement or any other Loan Document, in connection with the Aleris Acquisition (whether occurring before or after the Aleris Acquisition Closing Date),

in the case of each Aleris Borrower, except during the Aleris Deemed Borrowing Base Period, the eligibility on and after the Aleris Acquisition Closing

Date of Accounts and Inventory owned by such Aleris Borrower for inclusion in such Aleris Borrower's Borrowing Base shall be subject to such other conditions precedent, eligibility criteria and Reserves as may be established by the Administrative Agent in its Permitted Discretion (without regard to clauses (a) through (d) of such definition) based on the results of Acceptable Collateral Diligence, and in each case the Lenders, each Issuing Bank, each

Swingline Lender, and each Loan Party hereby agrees that this Agreement, including, but not limited to, Reserves, eligibility criteria and advance rates hereunder, may be amended, supplemented or otherwise modified by the Administrative Agent to treat such Accounts and Inventory as Eligible Accounts or Eligible Inventory of such Aleris Borrower (or to cause certain Accounts and Inventory of such Aleris Borrower to be ineligible or subject to Reserves or lower advance rates) in the Administrative Agent's Permitted Discretion (without regard to clauses (a) through (d) of such definition) based on the results of such Acceptable Collateral Diligence, and in connection therewith, the Administrative Agent may require legal opinions regarding the creation and perfection of the Collateral Agent's Liens in any relevant Accounts or Inventory, including legal opinions from the jurisdiction in which the Inventory is located, in which the applicable Account is originated, and the jurisdiction of the account debtor, satisfaction of any requirements to notify account debtors in a manner deemed necessary and desirable, and may require periodic scheduling of Accounts and Inventory subject to pledge, or other actions reasonably necessary to identify Accounts and Inventory subject to a pledge. The Administrative Agent shall promptly notify the Administrative Borrower of any conditions precedent, eligibility criteria, changes in advance rates and Reserves established in accordance with this Section 11.02(l).

SECTION 11.03 Expenses; Indemnity; Damage Waiver.

(a) Costs and Expenses. Borrowers shall reimburse each Agent or Receiver (or, to the extent set forth below, the Lenders) for all Extraordinary Expenses. Borrowers shall also reimburse each Agent for all legal, accounting, appraisal, consulting, and other fees, costs and expenses incurred by it in connection with (a) ~~negotiation and preparation of~~ advising, structuring, drafting, reviewing, administering (including travel, meals, and lodging), syndicating (including reasonable costs and expenses relative to the rating of the Term Loan, CUSIP, DXSyndicate™, SyndTrak or other communication costs incurred in connection with a syndication of the loan facilities), negotiating and preparing any Loan Documents, and including any ~~amendment or other modification thereof~~ of the foregoing in connection with each step of the Permitted Reorganization, the Aleris Acquisition and the Permitted Holdings Amalgamation, and in connection with any amendment, amendment and restatement, modification or waiver of the provisions hereof or of any of the foregoing (whether or not the transactions contemplated hereby or thereby shall be consummated), including in connection with post-closing searches to confirm that security filings and recordations have been properly made, (b) administration of and actions relating to any Collateral, Loan Documents and transactions contemplated thereby, including any actions taken to perfect or maintain priority of Collateral Agent's Liens on any Collateral, to maintain any insurance required hereunder or to verify Collateral; and (c) subject to the limits of Section 5.07(c), each field examination, inspection, audit, valuation or appraisal with respect to any Loan Party or Collateral, whether prepared by an Agent's personnel or a third party; provided that legal fees shall be limited to (together with allocated costs of internal counsel) the reasonable fees, charges and disbursements of one external counsel (plus local counsel in each applicable jurisdiction and one specialty counsel in each reasonably necessary specialty area (including Debtor Relief Laws)) for the Administrative Agent and/or the Collateral Agent, one external counsel (plus local counsel in each applicable jurisdiction) for the Lenders, and one external counsel (plus local counsel in each applicable jurisdiction) for any Receiver, and one or more additional counsel to Lenders and Agents if one or more conflicts of interest arise. All legal, accounting and consulting fees shall be charged to Borrowers by Agents' professionals at their full hourly rates, regardless of any reduced or alternative fee billing arrangements that Agent, any Lender or any of their Affiliates may have with such professionals with respect to this or any other transaction. If, for any reason (including inaccurate reporting on financial statements or a Compliance Certificate), it is determined that a higher Applicable Margin should have applied to a period than was actually applied, then the proper margin shall be applied retroactively and Borrowers shall immediately pay to Administrative Agent, for the *pro rata* benefit of Lenders, an amount equal to the difference between the amount of interest and fees that would have accrued using the proper margin and the amount actually paid.

(b) Indemnification by Loan Parties. EACH LOAN PARTY SHALL INDEMNIFY AND HOLD HARMLESS THE INDEMNITEES AGAINST ANY CLAIMS THAT MAY BE INCURRED BY OR ASSERTED AGAINST ANY INDEMNITEE, INCLUDING CLAIMS ARISING FROM THE NEGLIGENCE OF AN INDEMNITEE, **IN EACH CASE, WHETHER BROUGHT BY A THIRD PARTY OR BY ANY LOAN PARTY AND REGARDLESS OF WHETHER ANY INDEMNITEE IS A PARTY THERETO.** In no event shall any party to a Loan Document have any obligation thereunder to indemnify or hold harmless an Indemnatee with respect to a Claim that is determined in a final, non-appealable judgment by a court of competent jurisdiction to result from the gross negligence or willful misconduct of such Indemnatee. WITHOUT LIMITATION OF THE FOREGOING, IT IS THE INTENTION OF THE LOAN PARTIES, AND THE LOAN PARTIES AGREE, THAT THE FOREGOING INDEMNITIES SHALL APPLY TO EACH INDEMNITEE WITH RESPECT TO LOSSES, CLAIMS, DAMAGES, PENALTIES, LIABILITIES AND RELATED EXPENSES (INCLUDING, WITHOUT LIMITATION, ALL EXPENSES OF LITIGATION OR PREPARATION THEREFOR), WHICH IN WHOLE OR IN PART ARE CAUSED BY OR ARISE OUT OF THE COMPARATIVE, CONTRIBUTORY OR SOLE NEGLIGENCE OF SUCH (AND/OR ANY OTHER) INDEMNITEE.

(c) Waiver of Consequential Damages, Etc. To the fullest extent permitted by Applicable Law, no Loan Party shall assert, and each Loan Party hereby waives, any claim against any Indemnatee, on any theory of liability, for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Document or any

agreement or instrument contemplated hereby, the transactions contemplated hereby or thereby, any Loan or Letter of Credit or the use of the proceeds thereof. No Indemnitee referred to in paragraph (b) above shall be liable for any damages arising from the use by unintended recipients of any information or other materials distributed by it through telecommunications, electronic or other information transmission systems in connection with this Agreement or the other Loan Documents or the transactions contemplated hereby or thereby.

(d) Payments. All amounts due under this Section shall be payable not later than three (3) Business Days after demand therefor accompanied by reasonable particulars of amounts due.

SECTION 11.04 Successors and Assigns.

(a) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Loan Parties, each Agent, the Lenders, the other Secured Parties, and their respective successors and assigns, except that (a) no Loan Party shall have the right to assign its rights or delegate its obligations under any Loan Documents (except as a result of a transaction expressly permitted by Section 6.05(c) or (e)); and (b) any assignment by a Lender must be made in compliance with Section 11.04(c). Each Agent may treat the Person which made any Loan as the owner thereof for all purposes until such Person makes an assignment in accordance with Section 11.04(c). Any authorization or consent of a Lender shall be conclusive and binding on any subsequent transferee or assignee of such Lender.

(b) Participations.

(i) Permitted Participants; Effect. Any Lender may, in the ordinary course of its business and in accordance with Applicable Law, at any time sell to a financial institution other than a Defaulting Lender (a “**Participant**”) a participating interest in the rights and obligations of such Lender under any Loan Documents. Despite any sale by a Lender of participating interests to a Participant, such Lender’s obligations under the Loan Documents shall remain unchanged, such Lender shall remain solely responsible to the other parties hereto for performance of such obligations, such Lender shall remain the holder of its Loans and Commitments for all purposes, all amounts payable by Borrowers shall be determined as if such Lender had not sold such participating interests, and Borrowers and each Agent shall continue to deal solely and directly with such Lender in connection with the Loan Documents. Each Lender shall be solely responsible for notifying its Participants of any matters under the Loan Documents, and each Agent and the other Lenders shall not have any obligation or liability to any such Participant. Subject to the following sentence, each Borrower agrees that each Participant shall be entitled to the benefits of Section 2.06(j), Section 2.12, Section 2.13, Section 2.15, Section 2.16, Section 2.21, and Section 7.10 (subject to the requirements of those Sections) to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (c) of this Section (and such Participant shall be deemed to be a Lender for purposes of the definition of Excluded Taxes); provided that a Participant shall not be entitled to such benefits unless (A) such Participant and its respective participation are recorded in the Register in accordance with Section 11.04(d) as if such Participant were a Lender and (B) such Participant complies with Section 2.15 as if such Participant were a Lender. A Participant shall not be entitled to receive any greater payment under Section 2.06(j), Section 2.12, Section 2.13, Section 2.15, Section 2.16, Section 2.21, and Section 7.10 than the applicable Lender would have been entitled to receive with respect to the participation sold to such Participant, unless the sale of the participation to such Participant is made with Administrative Borrower’s prior written consent.

(ii) Voting Rights. Each Lender shall retain the sole right to approve, without the consent of any Participant, any amendment, waiver or other modification of any Loan Documents other than that which (A) forgives principal, interest or fees, (B) reduces the stated interest rate or fees payable with respect to any Loan or Commitment in which such Participant has an interest, (C) postpones the Maturity Date or any date fixed for any regularly scheduled payment of principal, interest or fees on such Loan or Commitment, (D) except pursuant to the Intercreditor Agreement, as expressly provided in this Agreement or as otherwise provided by any such Guarantee, releases all or substantially all of the Subsidiary Guarantors from their Guarantees or limits the liability of all or substantially all of the Subsidiary Guarantors in respect of such Guarantees, or (E) except pursuant to the Intercreditor Agreement or the express terms hereof, releases all or substantially all of the Collateral.

(iii) Benefit of Set-Off. Borrowers agree that each Participant shall have a right of set-off in respect of its participating interest to the same extent as if such interest were owing directly to a Lender, and each Lender shall also retain the right of set-off with respect to any participating interests sold by it. By exercising any right of set-off, a Participant agrees to share with Lenders all amounts received through its set-off, in accordance with Section 11.08 as if such Participant were a Lender.

(c) Assignments.

(i) Permitted Assignments. A Lender may assign to an Eligible Assignee any of its rights and obligations under the Loan Documents, as long as (a) each assignment is of a constant, and not a varying, percentage of the transferor Lender’s rights and obligations under the Loan Documents and, in the case of a partial assignment to a Person other than a Lender, a U.S.-based or Irish-based Affiliate of a Lender or an Approved Fund, is in a minimum principal amount of \$10,000,000 (unless otherwise agreed by Administrative Agent in its discretion) and integral multiples of \$5,000,000 in excess of that amount; (b) except in the case of an assignment in whole of a Lender’s rights and obligations, the aggregate amount of the Commitments retained by the transferor Lender is at least \$10,000,000 (unless otherwise agreed by Administrative Agent in its discretion); and (c) the parties to each such assignment shall execute and deliver to Administrative Agent, for its acceptance and recording, an Assignment and Assumption. Nothing herein shall limit the right of a Lender to pledge or assign any rights under the Loan Documents to (i) any Federal Reserve Bank or the United States Treasury as collateral security pursuant to Regulation A of the Board and any Operating Circular issued by such Federal Reserve Bank or any other central banking authority, or (ii) counterparties to swap agreements relating to any Loans; provided, however, that any payment by any Loan Party to the assigning Lender in respect of any Obligations assigned as described in this sentence shall satisfy the Loan Parties’ obligations hereunder to the extent of such

payment, and no such assignment shall release the assigning Lender from its obligations hereunder. So long as no Event of Default shall have occurred and is continuing, no assignment or transfer of all or a portion of rights and obligations under this Agreement (including all or a portion of its Commitment or the Loans at the time owing to it) shall be made by a Lender that is a Swiss Qualifying Bank to any assignee that is not a Swiss Qualifying Bank except in accordance with Section 11.04(f).

(ii) Effect; Effective Date. Upon delivery to Administrative Agent of an Assignment and Assumption and a processing fee of \$3,500 (unless (A) such assignment is from a Lender to a U.S.-based or Irish-based Affiliate of a Lender or (B) otherwise agreed by Administrative Agent in its discretion), the assignment shall become effective as specified in the notice (subject to acceptance and recording thereof by the Administrative Agent pursuant to Section 11.04(d)), if it complies with this Section 11.04. From such effective date, the Eligible Assignee shall for all purposes be a Lender under the Loan Documents, and shall have all rights and obligations of a Lender thereunder. Upon consummation of an assignment, the transferor Lender, Agents and Borrowers shall make appropriate arrangements for issuance of replacement and/or new Notes, as applicable. The transferee Lender shall comply with Section 2.15 and Section 2.21 and deliver, upon request, an administrative questionnaire satisfactory to Administrative Agent.

(iii) Certain Transfers. In the event of a transfer by novation of all or part of its rights and obligations under this Agreement by a Lender, such Lender expressly reserves the rights, powers, privileges and actions that it enjoys under any Security Documents governed by French law in favor of its Eligible Assignee, in accordance with the provisions of article 1334 *et seq.* of the French *code civil*.

(iv) Preservation of Belgian Security Agreements. The benefit of the Belgian Security Agreements and all security interests created thereunder shall automatically transfer to any assignee or transferee (by way of novation or otherwise) of part or all of the obligations expressed to be secured by the Belgian Security Agreements. For the purpose of Article 1278 and Article 1281 of the Belgian Civil Code (and, to the extent applicable, any similar provisions of foreign law), the Collateral Agent, the other Secured Parties and each of the other Loan Parties hereby expressly reserve the preservation of the Belgian Security Agreements and all security interests created thereunder in case of assignment, novation, amendment or any other transfer or change of the obligations expressed to be secured by the Belgian Security Agreements (including, without limitation, an extension of the term or an increase of the amount of such obligations or the granting of additional credit) or of any change of any of the parties to this Agreement or any other Loan Document.

(d) Register. The Administrative Agent, acting solely for this purpose as an agent of the Borrowers, shall, at all times while the Loans and LC Disbursements (or any of them) are outstanding, maintain at one of its offices a copy of each Assignment and Assumption delivered to it and a register for the recordation of the names and addresses of the Lenders, and the Commitments of, and principal amounts of the Loans and LC Disbursements owing to, each Lender pursuant to the terms hereof from time to time (the “**Register**”). The entries in the Register shall be conclusive absent manifest error, and the Borrowers, the Administrative Agent, the Issuing Banks and the Lenders shall treat each person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by the Borrowers, the Issuing Banks, the Collateral Agent, the Swingline Lender and any Lender (with respect to its own interest only), at any reasonable time and from time to time upon reasonable prior notice. The requirements of this Section 11.04(d) are intended to result in any and all Loans and LC Disbursements being in “registered form” for purposes of Section 871, Section 881 and any other applicable provision of the Code, and shall be interpreted and applied in a manner consistent therewith. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Borrowers, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Commitments and Loans or other obligations under the Loan Documents (the “**Participant Register**”); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register (including the identity of any Participant or any information relating to a Participant's interest in any commitments, loans, letters of credit or its other obligations under any Loan Document) to any Person except to the extent that such disclosure is necessary to establish that such commitment, loan, letter of credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each Person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary. For the avoidance of doubt, the Administrative Agent (in its capacity as Administrative Agent) shall have no responsibility for maintaining a Participant Register.

(e) Electronic Execution of Assignments. The words “execution,” “signed,” “signature,” and words of like import in any Assignment and Assumption shall be deemed to include electronic signatures or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any requirement of Applicable Law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act.

(f) Successors and Assigns.

(i) Notwithstanding anything in Sections 11.04(a) - (e), but only so long as no Event of Default shall have occurred and is continuing, except as permitted by Section 11.04(c)(i), no assignment or transfer of all or a portion of any Lender's rights and obligations under this Agreement (including all or a portion of its Commitment or the Loans at the time

owing to it, and including assignment by way of security, novation or sub-participations) to a Swiss Non-Qualifying Bank shall be made without the prior written consent of ~~the~~each Swiss Borrower, except that such consent shall be given:

(1) if the transferee is an existing Lender; or

(2) if as a result of a change in Swiss Tax laws, a violation of the Ten Non-Bank Regulations and the Twenty Non-Bank Regulations no longer results in the imposition of Swiss stamp tax and/or Swiss withholding tax.

(ii) Any Lender that enters into a participation or sub-participation in relation to its Revolving Commitment or Loans in respect thereof shall ensure that, unless an Event of Default shall have occurred and is continuing:

(1) the terms of such participations or sub-participation agreement prohibit the participant or sub-participant from entering into further sub-participation agreements (in relation to the rights between it and such Lender) and transferring, assigning (including by way of security) or granting any interest over the participant or sub-participation agreement, except in each case to a person who is an existing Lender, but subject to the consent contained above in paragraph (i) of this Section 11.04(f);

(2) the identity of the participant or sub-participant is permitted to be disclosed to the Swiss Federal Tax Administration by ~~the~~each Swiss Borrower;

(3) the participant or sub-participant enters into a unilateral undertaking in favor of each Swiss Borrower to abide by the terms included in the participations or sub-participation agreement to reflect this Section 11.04(f) and Section 2.21; and

(4) the terms of such participations or sub-participation agreement oblige the participant or sub-participant, in respect of any further sub-participation, assignment, transfer or grant, to include, *mutatis mutandis*, the provisions of this Section, including a requirement that any further sub-participant, assignee or grantee enters into such undertaking and abides by the terms of Section 2.21.

Notwithstanding the foregoing clauses (1) – (4), unless an Event of Default shall have occurred and is continuing, participations or sub-participations in relation to any Lender's Revolving Commitment or Loans in respect thereof are not permitted unless (y) such participant or subparticipant is a Swiss Qualifying Bank or, (z) if and to the extent there are in total not more than 10 Swiss Non-Qualifying Banks (including Lenders, participants and/or sub-participants), ~~the~~each Swiss Borrower consents to such participations or sub-participations under this Section 11.04(f)(ii), whereby such consent shall not be unreasonably withheld and the relevant participations or sub-participations shall be counted against the number of Permitted Swiss NonQualifying Banks.

(iii) For the avoidance of doubt, nothing in subsection (ii) above restricts any Lender, participant or sub-participant from entering into any agreement with another person under which payments are made by reference to this Agreement or to any hereto related participation or sub-participation agreement (including without limitation credit default or total return swaps), provided such agreement is not treated as a sub-participation for the purposes of the Ten Non-Bank Regulations and the Twenty Non-Bank Regulations.

SECTION 11.05 Survival of Agreement. All covenants, agreements, representations and warranties made by the Loan Parties in the Loan Documents and in the certificates or other instruments delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the other parties hereto and shall survive the execution and delivery of the Loan Documents and the making of any Loans and issuance of any Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Agents, any Issuing Bank or any Lender may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Commitments have not expired or terminated. The provisions of Section 2.06(j), Section 2.12, Section 2.14, Section 2.15, Section 2.16, Section 2.18, Section 2.21, Section 7.10, Section 11.03, Section 11.33, ARTICLE X, ~~and~~ this Section 11.05, Section 11.09 and Section 11.10 shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the payment of the Reimbursement Obligations, the expiration or termination of the Letters of Credit and the Commitments or the termination of this Agreement or any provision hereof.

SECTION 11.06 Counterparts; Integration; Effectiveness. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement and the other Loan Documents, any separate letter agreements with respect to fees payable to any Agent or the Arrangers, and any provisions of the Engagement Letter and the Fee Letter that are explicitly stated to survive the execution and delivery of this Agreement (which surviving obligations are hereby assumed by the Borrowers) constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof. Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof that, when taken together, bear the signatures of each of the other parties hereto. Delivery of an executed counterpart of a signature page of this Agreement by telecopier shall be effective as delivery of a manually executed counterpart of this Agreement.

SECTION 11.07 Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

SECTION 11.08 Right of Setoff. Subject to the Intercreditor Agreement, if an Event of Default shall have occurred and be continuing, each Lender, each Issuing Bank, and each of their respective Affiliates is hereby authorized at any time and from time to time, to the fullest extent permitted by Applicable Law, to set off and apply any and all deposits (general or special, time or demand, provisional or final, in whatever currency) at any time held and other obligations (in whatever currency) at any time owing by such Lender, such Issuing Bank or any such Affiliate to or for the credit or the account of any Borrower or any other Loan Party against any and all of the obligations of such Borrower or such Loan Party now or hereafter existing under this Agreement or any other Loan Document to such Lender or such Issuing Bank, irrespective of whether or not such Lender or such Issuing Bank shall have made any demand under this Agreement or any other Loan Document and although such obligations of such Borrower or such Loan Party may be contingent or unmatured or are owed to a branch or office of such Lender or such Issuing Bank different from the branch or office holding such deposit or obligated on such indebtedness. The rights of each Lender, each Issuing Bank and their respective Affiliates under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, such Issuing Bank or their respective Affiliates may have. Each Lender and each Issuing Bank agrees to notify the Administrative Borrower and the Administrative Agent promptly after any such setoff and application; provided that the failure to give such notice shall not affect the validity of such setoff and application.

SECTION 11.09 GOVERNING LAW; JURISDICTION; CONSENT TO SERVICE OF PROCESS; BRAZILIAN CODE.

(a) **GOVERNING LAW.** THIS AGREEMENT SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.

(b) **SUBMISSION TO JURISDICTION.** EACH LOAN PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE EXCLUSIVE JURISDICTION OF THE SUPREME COURT OF THE STATE OF NEW YORK SITTING IN NEW YORK COUNTY AND OF THE UNITED STATES DISTRICT COURT OF THE SOUTHERN DISTRICT OF NEW YORK, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO ANY LOAN DOCUMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT SHALL AFFECT ANY RIGHT THAT ANY AGENT, ANY ISSUING BANK OR ANY LENDER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT AGAINST ANY LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) **WAIVER OF VENUE.** EACH LOAN PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION WHICH IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY SUIT, ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT IN ANY COURT REFERRED TO IN SECTION 11.09(B). EACH FRENCH GUARANTOR AND EACH OTHER FRENCH SUBSIDIARY HEREBY WAIVES THE BENEFIT OF THE PROVISIONS OF ARTICLE 14 OF THE FRENCH *CODE CIVIL*. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) **SERVICE OF PROCESS.** EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO ANY LOAN DOCUMENT, IN THE MANNER PROVIDED FOR NOTICES (OTHER THAN TELECOPIER, E-MAIL OR OTHER ELECTRONIC COMMUNICATION) IN SECTION 11.01. EACH LOAN PARTY HEREBY IRREVOCABLY DESIGNATES, APPOINTS AND EMPOWERS

CSC CORPORATION, 1180 AVE OF THE AMERICAS, SUITE 210, NEW YORK, NEW YORK, 10036 (TELEPHONE NO: 212-299-5600) (TELECOPY NO: 212-2995656) (ELECTRONIC MAIL ADDRESS: MWIENER@CSCINFO.COM) (THE "PROCESS AGENT"), IN THE CASE OF ANY SUIT, ACTION OR PROCEEDING BROUGHT IN THE UNITED STATES AS ITS DESIGNEE, APPOINTEE AND AGENT TO RECEIVE, ACCEPT AND ACKNOWLEDGE FOR AND ON ITS BEHALF, AND IN RESPECT OF ITS PROPERTY, SERVICE OF ANY AND ALL LEGAL PROCESS, SUMMONS, NOTICES AND DOCUMENTS THAT MAY BE

SERVED IN ANY ACTION OR PROCEEDING ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR ANY LOAN DOCUMENT.

NOTHING IN THIS AGREEMENT OR ANY OTHER LOAN DOCUMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

(c) BRAZILIAN CODE. FOR PURPOSES SOLELY OF ARTICLE 9 OF BRAZILIAN DECREE LAW NO. 4,657 DATED SEPTEMBER 4, 1942, AND ARTICLE 78 OF THE BRAZILIAN CIVIL CODE, THE TRANSACTIONS CONTEMPLATED HEREBY HAVE BEEN CONSTITUTED AND PROPOSED TO THE BRAZILIAN GUARANTOR BY THE LENDERS OUTSIDE BRAZIL.

SECTION 11.10 WAIVER OF JURY TRIAL. EACH LOAN PARTY HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT, ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

SECTION 11.11 Headings. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

SECTION 11.12 Treatment of Certain Information; Confidentiality. Each Agent, each Lender and each Issuing Bank, each individually (and not jointly or jointly and severally), shall maintain the confidentiality of all Information (as defined below), except that Information may be disclosed (a) to its Affiliates, and to its and their partners, directors, officers, employees, trustees, agents, attorneys, accountants, advisors, auditors, consultants and representatives (provided such Persons are informed of the confidential nature of the Information and instructed to keep it confidential); (b) to the extent requested by any governmental, regulatory or selfregulatory authority purporting to have jurisdiction over it or its Affiliates (including any selfregulatory authority, such as the National Association of Insurance Commissioners); (c) to the extent required by Applicable Law or by any subpoena or other legal process; (d) to any other party hereto; (e) in connection with any action or proceeding, or other exercise of rights or remedies, relating to any Loan Documents or Secured Obligations; (f) subject to an agreement containing provisions substantially the same as this Section, to any actual or potential assignee, Participant or other Person acquiring an interest in any Obligations ~~or any,~~ including the pledge of any Lender's interest under this Agreement, or any actual or prospective party (or its advisors) to any Bank Product or swap or derivative transaction relating to any Loan Party and its obligations, or any rating agency for the purpose of obtaining a credit rating applicable to any Lender (and such Person may disclose such Information to Persons employed or engaged by them as described in clause (a) above); (g) with the consent of Administrative Borrower or the applicable Loan Party; ~~or~~ (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section or (ii) is available to any Agent, any Lender, any Issuing Bank or any of their Affiliates on a nonconfidential basis from a source other than the Loan Parties; ~~Notwithstanding the foregoing, each Agent and each Lender may publish or disseminate general information describing this credit facility, including the names and addresses of Loan Parties and a general description of Loan Parties' businesses, and may use Loan Parties' logos, trademarks or product photographs in advertising materials,~~ (i) in connection with any litigation or other adversary proceeding involving parties hereto which such litigation or adversary proceeding involves claims related to the rights or duties of such parties under this Agreement or the other Loan Documents, (j) to insurers, insurance brokers and other credit protection and service providers of any Agent, Issuing Bank, Lender, or any of their respective Affiliates who are under a duty of confidentiality to such Agent, Issuing Bank, Lender or Affiliate, and (k) in connection with, and to the extent reasonably necessary for, the exercise of any secured creditor remedy under this Agreement or under any other Loan Document. Anything in this Agreement to the contrary notwithstanding, each Agent and each Lender may disclose information concerning the terms and conditions of this Agreement and the other Loan Documents to loan syndication and pricing reporting services or in its marketing or promotional materials, with such information to consist of deal terms and other information customarily found in such publications or marketing or promotional materials and may otherwise use the name, logos, and other insignia of any Borrower or the other Loan Parties and the Commitments provided hereunder in any "tombstone" or other advertisements, on its website or in other marketing materials of each Agent and each Lender. As used herein, "Information" means all material, non-public information received from a Loan Party or Subsidiary relating to it or its business that is identified as confidential when delivered. Any Person required to maintain the confidentiality of Information pursuant to this Section shall be deemed to have complied if it exercises the same degree of care that it accords its own confidential information. Each Agent, each Lender and each Issuing Bank acknowledges that (i) Information may include material nonpublic information concerning a Loan Party or Subsidiary; (ii) it has developed compliance procedures regarding the use of material non-public information; and (iii) it will handle such material non-public information in accordance with Applicable Law, including federal and state securities laws.

SECTION 11.13 USA PATRIOT Act Notice. Each Lender and each Issuing Bank that is subject to the Act (as hereinafter defined) and ~~the Administrative~~ each Agent (for itself and not on behalf of any Lender or Issuing Bank) hereby notifies the Borrowers and the other Loan Parties that pursuant to the requirements of the USA PATRIOT Act (Title III of Pub. L. 107-56

(signed into law October 26, 2001)) (the “**Patriot Act**”), it is required to obtain, verify and

record information that identifies the Borrowers and the other Loan Parties, which information includes the name, address and tax identification number of the Borrowers and the other Loan Parties and other information regarding the Borrowers and the other Loan Parties that will allow such Lender ~~or the Administrative, such Issuing Bank or such~~ Agent, as applicable, to identify the Borrowers and the other Loan Parties in accordance with the Patriot Act. This notice is given in accordance with the requirements of the Patriot Act and is effective as to the Lenders, the Issuing Banks and the ~~Administrative Agent~~Agents.

SECTION 11.14 Interest Rate Limitation. Notwithstanding anything to the contrary contained in any Loan Document, the interest paid or agreed to be paid under the Loan Documents shall not exceed the maximum rate of non-usurious interest permitted by Applicable Law (the “**Maximum Rate**”). If any Agent or any Lender shall receive interest in an amount that exceeds the Maximum Rate, the excess interest shall be applied to the principal of the Obligations or, if it exceeds such unpaid principal, refunded to Borrowers. In determining whether the interest contracted for, charged or received by an Agent or a Lender exceeds the Maximum Rate, such Person may, to the extent permitted by Applicable Law, (a) characterize any payment that is not principal as an expense, fee or premium rather than interest; (b) exclude voluntary prepayments and the effects thereof; and (c) amortize, prorate, allocate and spread in equal or unequal parts the total amount of interest throughout the contemplated term of the Obligations hereunder.

SECTION 11.15 [intentionally omitted].

SECTION 11.16 Obligations Absolute. To the fullest extent permitted by Applicable Law, all obligations of the Loan Parties hereunder shall be absolute and unconditional irrespective of:

- (a) any Insolvency Proceeding of any Loan Party;
- (b) any lack of validity or enforceability of any Loan Document or any other agreement or instrument relating thereto against any Loan Party;
- (c) any change in the time, manner or place of payment of, or in any other term of, all or any of the Obligations, or any other amendment or waiver of or any consent to any departure from any Loan Document or any other agreement or instrument relating thereto;
- (d) any exchange, release or non-perfection of any other Collateral, or any release or amendment or waiver of or consent to any departure from any guarantee, for all or any of the Obligations;
- (e) any exercise or non-exercise, or any waiver of any right, remedy, power or privilege under or in respect hereof or any Loan Document; or
- (f) any other circumstances which might otherwise constitute a defense available to, or a discharge of, the Loan Parties.

Notwithstanding anything herein to the contrary, each party hereby acknowledges that the provisions of article 1195 of the French *code civil* shall not apply to it with respect to its obligations under the French Security Agreements and that it shall not be entitled to make any claim under article 1195 of the French *code civil*.

SECTION 11.17 Intercreditor Agreement. Notwithstanding anything to the contrary contained herein, each Lender acknowledges that the Lien and security interest granted to the Collateral Agent pursuant to the Security Documents and the exercise of any right or remedy by such Collateral Agent thereunder are subject to the provisions of the Intercreditor Agreement. In the event of any conflict between the terms of the Intercreditor Agreement and the Security Documents, the terms of the Intercreditor Agreement shall govern and control.

SECTION 11.18 Judgment Currency.

(a) Each Loan Party’s obligations hereunder and under the other Loan Documents to make payments in the applicable Approved Currency (pursuant to such obligation, the “**Obligation Currency**”) shall not be discharged or satisfied by any tender or recovery pursuant to any judgment expressed in or converted into any currency other than the Obligation Currency, except to the extent that such tender or recovery results in the effective receipt by the Administrative Agent or the respective Lender of the full amount of the Obligation Currency expressed to be payable to the Administrative Agent or such Lender under this Agreement or the other Loan Documents. If, for the purpose of obtaining or enforcing judgment against any Loan Party in any court or in any jurisdiction, it becomes necessary to convert into or from any currency other than the Obligation Currency (such other currency being hereinafter referred to as the “**Judgment Currency**”) an amount due in the Obligation Currency, the conversion shall be made at the Relevant Currency Equivalent, and in the case of other currencies, the rate of exchange (as quoted by the Administrative Agent or if the Administrative Agent does not quote a rate of exchange on such currency, by a known dealer in such currency designated by the Administrative Agent) determined, in each case, as of the Business Day immediately preceding the day on which the judgment is given (such Business Day being hereinafter referred to as the “**Judgment Currency Conversion Date**”).

(b) If there is a change in the rate of exchange prevailing between the Judgment Currency Conversion Date and the date of actual payment of the amount due, each Borrower covenants and agrees to pay, or cause to be paid, such additional amounts, if any (but in any event not a lesser amount) as may be necessary to ensure that the amount paid in the Judgment Currency, when converted at the rate of exchange prevailing on the date of payment, will produce the amount of the Obligation Currency which could have been purchased with the amount of Judgment Currency stipulated in the judgment or judicial award at the rate of exchange prevailing on the Judgment Currency Conversion Date.

(c) For purposes of determining the Relevant Currency Equivalent or any other rate of exchange for this Section 11.18, such amounts shall include any premium and costs payable in connection with the purchase of the Obligation Currency.

SECTION 11.19 Euro.

(a) If at any time that an Alternate Currency Revolving Loan is outstanding, the relevant Alternate Currency (other than the euro) is fully replaced as the lawful currency of the country that issued such Alternate Currency (the “**Issuing Country**”) by the euro so that all payments are to be made in the Issuing Country in euros and not in the Alternate Currency previously the lawful currency of such country, then such Alternate Currency Revolving Loan shall be automatically converted into a Loan denominated in euros in a principal amount equal to the amount of euros into which the principal amount of such Alternate Currency Revolving Loan would be converted pursuant to law and thereafter no further Loans will be available in such Alternate Currency.

(b) The Parent Borrower shall, or shall cause the applicable Loan Party from time to time, at the request of any Lender accompanied by reasonably documented particulars thereof, pay to such Lender the amount of any losses, damages, liabilities, claims, reduction in yield, additional expense, increased cost, reduction in any amount payable, reduction in the effective return of its capital, the decrease or delay in the payment of interest or any other return forgone by such Lender or its Affiliates as a result of the tax or currency exchange resulting from the introduction of, changeover to or operation of the euro in any applicable nation or eurocurrency market.

SECTION 11.20 Special Provisions Relating to Currencies Other Than Dollars.

(a) All funds to be made available to Administrative Agent pursuant to this Agreement in euros, Swiss francs or GBP shall be made available to Administrative Agent in immediately available, freely transferable, cleared funds to such account with such bank in such principal financial center in such Participating Member State (or in London) as Administrative Agent shall from time to time nominate for this purpose.

(b) In relation to the payment of any amount denominated in euros, Swiss francs or GBP, Administrative Agent shall not be liable to any Loan Party or any of the Lenders for any delay, or the consequences of any delay, in the crediting to any account of any amount required by this Agreement to be paid by Administrative Agent if Administrative Agent shall have taken all relevant and necessary steps to achieve, on the date required by this Agreement, the payment of such amount in immediately available, freely transferable, cleared funds (in euros, Swiss francs or GBP) to the account with the bank in the principal financial center in the Participating Member State which the Administrative Borrower or, as the case may be, any Lender shall have specified for such purpose. In this Section 11.20(b), “**all relevant steps**” means all such steps as may be prescribed from time to time by the regulations or operating procedures of such clearing or settlement system as Administrative Agent may from time to time determine for the purpose of clearing or settling payments of euros, Swiss francs or GBP. Furthermore, and without limiting the foregoing, Administrative Agent shall not be liable to any Loan Party or any of the Lenders with respect to the foregoing matters in the absence of its gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a final and non-appealable decision or pursuant to a binding arbitration award or as otherwise agreed in writing by the affected parties).

SECTION 11.21 Abstract Acknowledgment of Indebtedness and Joint Creditorship.

(a) Notwithstanding any other provision of this Agreement, each Loan Party hereby irrevocably and unconditionally agrees and covenants with the Collateral Agent by way of an abstract acknowledgment of indebtedness (*abstraktes Schuldversprechen*) that it owes to the Collateral Agent as creditor in its own right and not as a representative of the other Secured Parties, sums equal to, and in the currency of, each amount payable by such Loan Party to each of the Secured Parties under each of the Loan Documents and Bank Product Agreements relating to any Secured Obligations, as and when that amount falls due for payment under the relevant Secured Debt Agreement or would have fallen due but for any discharge resulting from failure of another Secured Party to take appropriate steps to preserve its entitlement to be paid that amount.

(b) Each Loan Party undertakes to pay to the Collateral Agent upon first written demand the amount payable by such Loan Party to each of the Secured Parties under each of the Secured Debt Agreements as such amount has become due and payable.

(c) The Collateral Agent has the independent right to demand and receive full or partial payment of the amounts payable by each Loan Party under this Section 11.21, irrespective of any discharge of such Loan Party’s obligation to pay those amounts to the other Secured Parties resulting from failure by them to take appropriate steps to preserve their entitlement to be paid those amounts.

(d) Any amount due and payable by a Loan Party to the Collateral Agent under this Section 11.21 shall be decreased to the extent that the other Secured Parties have received (and are able to retain) payment in full of the corresponding amount under the other provisions of the Secured Debt Agreements and any amount due and payable by a Loan Party to the other Secured Parties under those provisions shall be decreased to the extent that the Collateral Agent has received (and is able to retain) payment in full of the corresponding amount under this Section 11.21; provided that no Loan Party may consider its obligations towards a Secured Party to be so discharged by virtue of any set-off, counterclaim or similar defense that it may invoke vis-à-vis the Collateral Agent.

(e) The rights of the Secured Parties (other than the Collateral Agent) to receive payment of amounts payable by each Loan Party under the Secured Debt Agreements are several and are separate and independent from, and without prejudice to, the rights of the Collateral Agent to receive payment under this Section 11.21.

(f) In addition, but without prejudice to the foregoing, the Collateral Agent shall be the joint creditor (together with the relevant Secured Parties) of all obligations of each Loan Party towards each of the Secured Parties under the Secured Debt Agreements.

SECTION 11.22 Special Appointment of Collateral Agent for German Security.

(a) (i) Each Secured Party that is or will become party to this Agreement hereby appoints the Collateral Agent as trustee (*Treuhaender*) and administrator for the purpose of holding on trust (*Treuhand*), administering, enforcing and releasing the German Security (as defined below) for the Secured Parties, (ii) the Collateral Agent accepts its appointment as a trustee and administrator of the German Security on the terms and subject to the conditions set out in this Agreement and (iii) the Secured Parties, the Collateral Agent and all other parties to this Agreement agree that, in relation to the German Security, no Secured Party shall exercise any independent power to enforce any German Security or take any other action in relation to the enforcement of the German Security, or make or receive any declarations in relation thereto.

(b) To the extent possible, the Collateral Agent shall hold and administer any German Security which is security assigned, transferred or pledged under German law to it as a trustee for the benefit of the Secured Parties, where “**German Security**” shall mean the assets which are the subject of a security document which is governed by German law.

(c) Each Secured Party hereby authorizes and instructs the Collateral Agent (with the right of sub delegation) to enter into any documents evidencing German Security and to make and accept all declarations and take all actions as it considers necessary or useful in connection with any German Security on behalf of the Secured Parties. The Collateral Agent shall further be entitled to rescind, release, amend and/or execute new and different documents securing the German Security.

(d) The Secured Parties and the Collateral Agent agree that all rights and claims constituted by the abstract acknowledgment of indebtedness pursuant to ~~this Section 11.22~~ Section 11.21.21 and all proceeds held by the Collateral Agent pursuant to or in connection with such abstract acknowledgment of indebtedness are held by the Collateral Agent with effect from the date of such abstract acknowledgment of indebtedness in trust for the Secured Parties and will be administered in accordance with the Loan Documents and Bank Product Agreements relating to any Secured Obligations. The Secured Parties and the Collateral Agent agree further that the respective Loan Party’s obligations under such abstract acknowledgment of indebtedness shall not increase the total amount of the Secured Obligations (as defined in the respective agreement governing German Security) and shall not result in any additional liability of any of the Loan Parties or otherwise prejudice the rights of any of the Loan Parties. Accordingly, payment of the obligations under such abstract acknowledgment of indebtedness shall, to the same extent, discharge the corresponding Secured Obligations and vice versa.

(e) Each Secured Party hereby ratifies and approves all acts and declarations previously done by the Collateral Agent on such Secured Party’s behalf (including, for the avoidance of doubt the declarations made by the Collateral Agent as representative without power of attorney (*Vertreter ohne Vertretungsmacht*) in relation to the creation of any pledge (*Pfandrecht*) on behalf and for the benefit of any Secured Party as future pledgee or otherwise).

SECTION 11.23 Special Appointment of Collateral Agent in Relation to South Korea; Certain Lock-Up or Listing Agreements.

(a) Notwithstanding any other provision of this Agreement, each Loan Party hereby irrevocably and unconditionally undertakes to pay to the Collateral Agent, as creditor in its own right and not as representative of the other Secured Parties, sums equal to and in the currency of each amount payable by such Loan Party to each of the Secured Parties under each of the Loan Documents as and when that amount falls due for payment under the relevant Loan Document or would have fallen due but for any discharge resulting from failure of another Secured Party to take appropriate steps to preserve its entitlement to be paid that amount.

(b) The Collateral Agent shall have its own independent right to demand payment of the amounts payable by each Loan Party under this Section 11.23, irrespective of any discharge of such Loan Party’s obligation to pay those amounts to the Secured Parties resulting from failure by them to take appropriate steps to preserve their entitlement to be paid those amounts.

(c) Any amount due and payable by a Loan Party to the Collateral Agent under this Section 11.23 shall be decreased to the extent that the other Secured Parties have received (and are able to retain) payment in full of the corresponding amount under the other provisions of the Loan Documents and any amount due and payable by a Loan Party to the other Secured Parties under those provisions shall be decreased to the extent that the Collateral Agent has received (and is able to retain) payment in full of the corresponding amount under this Section 11.23.

(d) Subject to paragraph (c) above, the rights of the Secured Parties (in each case, other than the Collateral Agent) to receive payment of amounts payable by each Loan Party under the Loan Documents are several and are separate and independent from, and without prejudice to, the rights of the Collateral Agent to receive payment under this Section 11.23.

(e) The Administrative Agent and the Collateral Agent are authorized to enter into consents to any lock-up or listing agreement required by any applicable rule or regulation in connection with any listing or offering of Equity Interests in NKL and may consent to such Equity Interests being held by a depository or securities intermediary; provided, that the Collateral Agent’s Liens in the Equity Interests of NKL or its direct parents, 4260848 Canada Inc., 4260856 Canada Inc., and 8018227 Canada Inc., are not impaired.

(f) The parties hereto hereby acknowledge and agree that references to the Administrative Agent in Sections 11.23(a) through (d) in the Original Credit Agreement shall for all purposes be interpreted to refer to the Collateral Agent (as defined therein).

SECTION 11.24 Special Appointment of Collateral Agent in Relation to France. For the purpose of any French Security Agreements and all security interest created thereunder before the Amendment No. 2 Effective Date:

(a) Notwithstanding any other provision of this Agreement, each Loan Party hereby irrevocably and unconditionally undertakes insofar as necessary, in advance, to pay to the Collateral Agent, as creditor in its own right and not as representative of the other Secured Parties, sums equal to and in the currency of each amount payable by such Loan Party to each of the Secured Parties under each of the Loan Documents as and when that amount falls due for payment under the relevant Loan Document or would have fallen due but for any discharge resulting from failure of another Secured Party to take appropriate steps to preserve its entitlement to be paid that amount (such payment undertakings, obligations and liabilities which are the result thereof, hereinafter referred to as the “**Parallel Debt**”).

(b) The Collateral Agent shall have its own independent right to demand payment of the amounts payable by each Loan Party under this Section 11.24, irrespective of any discharge of such Loan Party’s obligation to pay those amounts to the other Secured Parties resulting from failure by them to take appropriate steps to preserve their entitlement to be paid those amounts.

(c) Any amount due and payable by a Loan Party to the Collateral Agent under this Section 11.24 shall be decreased to the extent that the other Secured Parties have received (and are able to retain) payment in full of the corresponding amount under the other provisions of the Loan Documents and any amount due and payable by a Loan Party to the other Secured Parties under those provisions shall be decreased to the extent that the Collateral Agent has received (and is able to retain) payment in full of the corresponding amount under this Section 11.24.

(d) The Collateral Agent shall apply any amounts received in payment of any Parallel Debt in accordance with the terms and conditions of this Agreement governing the application of proceeds in payment of any Secured Obligations.

(e) The rights of the Secured Parties (other than any Parallel Debt) to receive payment of amounts payable by each Loan Party under the Loan Documents are several and are separate and independent from, and without prejudice to, the rights of the Collateral Agent to receive payment under this Section 11.24.

SECTION 11.25 Swiss Tax Ruling. ~~The~~Any Swiss Borrower granting a security interest over real estate located in Switzerland shall obtain subsequent to the ~~Closing Date~~Amendment No. 2 Effective Date (but within a reasonable time frame) or, in the case of a Person that becomes a Swiss Borrower after the Amendment No. 2 Effective Date, subsequent to the date such Person becomes a Swiss Borrower (but within a reasonable time frame) (a) a ruling from the ~~Wallis cantonal~~ tax authority of the Canton where the relevant Swiss real estate is located confirming that the payment of interests under this Agreement shall not be subject to federal, cantonal, and municipal direct taxes levied at source in Switzerland as per Article 51 § 1 lit. d and Article 94 of the Swiss Federal Direct Tax Act of December 14, 1990 and as per Article 21 § 2 lit. a and Article 35 § 1 lit. e of the Swiss Federal Harmonization Direct Tax Act of December 14, 1990, but only to the extent and limited to the interests paid by the Swiss ~~Borrower~~Borrowers in connection with the Swiss Revolving ~~Loan~~Loans and which are secured by the relevant Swiss real estate mortgage ~~in an amount of CHF 60 million~~, and (b) a ruling from the ~~Zurich cantonal~~ tax authority of the Canton of seat of the relevant Swiss Borrower confirming that the aforesaid direct taxes levied at source may be solely ruled with the Canton where the relevant Swiss real estate is located. The Swiss ~~Borrower~~Borrowers further ~~acknowledges~~acknowledge that the gross-up mechanism provided for under Section 2.15 shall apply with respect to any such direct taxes levied at source.

SECTION 11.26 Designation of Collateral Agent under Civil Code of Quebec. Each of the parties hereto (including each Lender, acting for itself and on behalf of each of its Affiliates which are or become Secured Parties from time to time) confirms the appointment and designation of the Collateral Agent (or any successor thereto) as the person holding the power of attorney (*fondé de pouvoir*) within the meaning of Article 2692 of the Civil Code of Québec for the purposes of the hypothecary security to be granted by the Loan Parties or any one of them under the laws of the Province of Québec (such person now being known as the hypothecary representative) and, in such capacity, the Collateral Agent shall hold the hypothecs granted under the laws of the Province of Québec as such *fondé de pouvoir* in the exercise of the rights conferred thereunder. The execution by the Collateral Agent in its capacity as *fondé de pouvoir* prior to the ~~Closing~~Amendment No. 2 Effective Date of any document creating or evidencing any such hypothecs is hereby ratified and confirmed. Notwithstanding the provisions of Section 32 of the Act respecting the special powers of legal persons (Québec), the Collateral Agent may acquire and be the holder of any of the bonds secured by any such hypothec. Each future Secured Party, whether a Lender, an Issuer or a holder of any Secured Obligation, shall be deemed to have ratified and confirmed (for itself and on behalf of each of its Affiliates that are or become Secured Parties from time to time) the appointment of the Collateral Agent as *fondé de pouvoir*.

SECTION 11.27 Maximum Liability. Subject to Section 7.08 and Sections 7.11 to 7.15, it is the desire and intent of each Loan Party and the Secured Parties that their respective liability shall be enforced against each Loan Party to the fullest extent permissible under the laws and public policies applied in each jurisdiction in which enforcement is sought after giving effect to the rights of contribution established in the Contribution, Intercompany, Contracting and Offset Agreement that are valid and enforceable and not subordinated to the claims of other creditors as determined in such action or proceeding. If, however, and to the extent that, the obligations of any Loan Party under any Loan Document shall be adjudicated to be invalid or unenforceable for any reason (including, without limitation, because of any applicable state or federal law relating to fraudulent conveyances or transfers), then the amount of such Loan Party's obligations under the Loan Documents shall be deemed to be reduced and such Loan Party shall pay the maximum amount of the Secured Obligations which would be permissible under Applicable Law.

SECTION 11.28 NO ORAL AGREEMENT. THIS AGREEMENT AND THE OTHER LOAN DOCUMENTS REPRESENT THE FINAL AGREEMENT BETWEEN THE PARTIES AND MAY NOT BE CONTRADICTED BY EVIDENCE OF PRIOR, CONTEMPORANEOUS OR SUBSEQUENT ORAL AGREEMENTS BETWEEN THE PARTIES. THERE ARE NO UNWRITTEN AGREEMENTS BETWEEN THE PARTIES.

SECTION 11.29 Performance of Borrowers’ Obligations. Each Agent may, in its discretion at any time and from time to time, at Borrowers’ expense, pay any amount or do any act required of a Loan Party under any Loan Documents or otherwise lawfully requested by any Agent to (a)

enforce any Loan Documents or collect any Secured Obligations; (b) protect, insure, maintain or realize upon any Collateral; or (c) defend or maintain the validity or priority of Collateral Agent's Liens in any Collateral, including any payment of a judgment, insurance premium, warehouse charge, finishing or processing charge, or landlord claim, or any discharge of a Lien. All payments, costs and expenses (including Extraordinary Expenses) of any Agent under this Section shall be reimbursed to such Agent by Borrowers, **on demand**, with interest from the date incurred to the date of payment thereof at the Default Rate applicable to Base Rate Loans. Any payment made or action taken by any Agent under this Section shall be without prejudice to any right to assert an Event of Default or to exercise any other rights or remedies under the Loan Documents.

SECTION 11.30 Credit Inquiries. Each Loan Party hereby authorizes each Agent and each Lender (but they shall have no obligation) to respond to usual and customary credit inquiries from third parties concerning any Loan Party or Subsidiary.

SECTION 11.31 Relationship with Lenders. The obligations of each Lender hereunder are several, and no Lender shall be responsible for the obligations or Commitments of any other Lender. Amounts payable hereunder to each Lender shall be a separate and independent debt. It shall not be necessary for any Agent or any other Lender to be joined as an additional party in any proceeding for such purposes. Nothing in this Agreement and no action of any Agent, any Lender or any other Secured Party pursuant to the Loan Documents or otherwise shall be deemed to constitute any Agent and any Secured Party to be a partnership, association, joint venture or any other kind of entity, nor to constitute control of any Loan Party.

SECTION 11.32 No Advisory or Fiduciary Responsibility. In connection with all aspects of each transaction contemplated by any Loan Document, each Loan Party acknowledges and agrees that (a)(i) this credit facility and any related arranging or other services by any Agent, any Lender, any of their Affiliates or any arranger are arm's-length commercial transactions between the Loan Parties and such Person; (ii) the Loan Parties have consulted their own legal, accounting, regulatory and tax advisors to the extent they have deemed appropriate; and (iii) the Loan Parties are capable of evaluating and understanding, and do understand and accept, the terms, risks and conditions of the transactions contemplated by the Loan Documents; (b) each Agent, each Lender, their Affiliates and any arranger is and has been acting solely as a principal in connection with this credit facility, is not the financial advisor, agent or fiduciary for the Loan Parties, any of their Affiliates or any other Person, and has no obligation with respect to the transactions contemplated by the Loan Documents except as expressly set forth therein; and (c) each Agent, each Lender, their Affiliates and any arranger may be engaged in a broad range of transactions that involve interests that differ from those of the Loan Parties and their

Affiliates, and have no obligation to disclose any of such interests to the Loan Parties or their Affiliates. Each Loan Party hereby agrees that it will not claim (and, to the fullest extent permitted by Applicable Law, waives and releases any such claim) that any Agent, Arranger, Issuing Bank, Lender, Secured Party, or their respective Affiliates has rendered advisory services of any nature or respect or owes any fiduciary duty to such Loan Party in connection with any transaction contemplated hereby or by any other Loan Document.

SECTION 11.33 Marshaling; Payments Set Aside. None of the Agents or the other Secured Parties shall be under any obligation to marshal any assets in favor of any Loan Party or against any Secured Obligations. If any payment by or on behalf of any Borrower is made to any Agent or other Secured Party, or an Agent or other Secured Party exercises a right of setoff, and such payment or the proceeds of such setoff or any part thereof is subsequently invalidated, declared to be fraudulent or preferential, set aside or required (including pursuant to any settlement entered into by any Agent or other Secured Party in its discretion) to be repaid to a trustee, receiver or any other Person, then to the extent of such recovery, the Secured Obligation originally intended to be satisfied, and all Liens, rights and remedies relating thereto, shall be revived and continued in full force and effect as if such payment had not been made or such setoff had not occurred.

SECTION 11.34 One Obligation. The Loans, LC Obligations and other Secured Obligations shall constitute one general obligation of Borrowers and (unless otherwise expressly provided in any Loan Document) shall be secured by Collateral Agent's Lien upon all Collateral; provided, however, that each Agent and each other Secured Party shall be deemed to be a creditor of, and the holder of a separate claim against, each Borrower to the extent of any Secured Obligations jointly or severally owed by such Borrower.

SECTION 11.35 Acknowledgement and Consent to Bail-In of EEA Financial

Institutions Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document, to the extent such liability is unsecured, may be subject to the write-down and conversion powers of an EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

- (a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder which may be payable to it by any party hereto that is an EEA Financial Institution; and
- (b) the effects of any Bail-In Action on any such liability, including, if applicable:
 - (i) a reduction in full or in part or cancellation of any such liability;
 - (ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent undertaking, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability

under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the write-down and conversion powers of any EEA Resolution Authority.

SECTION 11.36 Lender Authorizations with respect to the NKL Share Repurchase.

The Lenders authorize and direct, in connection with the NKL Share Repurchase, the Collateral Agent to return any share certificates representing Equity Interests in NKL and sign any documentation required to give effect to the NKL Share Repurchase; provided, that after giving effect to the NKL Share Repurchase, certificates representing 100% of the Equity Interests in NKL held by Loan Parties are promptly delivered to the Term Loan Collateral Agent or its counsel along with such other documentation required to pledge such Equity Interests as Collateral.

SECTION 11.37 Special Appointment of Collateral Agent in Relation to Belgium. For the purpose of any Belgian Security Agreements and all security interests created thereunder, each Secured Party:

(a) appoints the Collateral Agent as its representative in accordance with (i) Article 5 of the Belgian Act of 15 December 2004 on financial collateral arrangements and several tax dispositions in relation to security collateral arrangements and loans of financial instruments; and (ii) Article 3 of Book III, Title XVII of the Belgian Civil Code, which appointment is hereby accepted; and

(b) agrees that the Collateral Agent shall not be severally and jointly liable with the Secured Parties.

SECTION 11.38 Belgian Parallel Debt in Relation to the Belgian Security Agreements.

For the purpose of any Belgian Security Agreements and all security interests created thereunder:

(a) in this Section 11.38: “Belgian Corresponding Debt” shall mean any amount which a Loan Party owes to a Secured Party under or in connection with the Loan Documents and “Belgian Parallel Debt” shall mean any amount which a Loan Party owes to the Collateral Agent under this Section;

(b) each Loan Party irrevocably and unconditionally undertakes to pay to the Collateral Agent amounts equal to, and in the currency or currencies of, its Belgian Corresponding Debt;

(c) the Belgian Parallel Debt of each Loan Party:

(i) shall become due and payable at the same time as its Belgian Corresponding Debt;

(ii) is independent and separate from, and without prejudice to, its Belgian Corresponding Debt;

(d) for purposes of this Section 11.38, the Collateral Agent:

(i) is the independent and separate creditor of each Belgian Parallel Debt;

(ii) acts in its own name and not as agent, representative or trustee of the Secured Parties and its claims in respect of each Belgian Parallel Debt shall not be held on trust; and

(iii) shall have the independent and separate right to demand payment of each Belgian Parallel Debt in its own name (including, without limitation, through any suit, execution, enforcement of security, recovery of guarantees and applications for and voting in any kind of insolvency proceeding);

(e) the Belgian Parallel Debt of a Loan Party shall be (a) decreased to the extent that its Belgian Corresponding Debt has been irrevocably and unconditionally paid or discharged, and (b) increased to the extent to that its Belgian Corresponding Debt has increased, and the Belgian Corresponding Debt of a Loan Party shall be (x) decreased to the extent that its Belgian Parallel Debt has been irrevocably and unconditionally paid or discharged, and (y) increased to the extent that its Belgian Parallel Debt has increased, in each case provided that the Belgian Parallel Debt of a Loan Party shall never exceed its Belgian Corresponding Debt; and

(f) all amounts received or recovered by the Collateral Agent in connection with this Section 11.38, to the extent permitted by applicable law, shall be applied in accordance with the terms and conditions of this Agreement.

SECTION 11.39 Dutch Parallel Debt in Relation to the Dutch Security Agreements.

For the purpose of any Dutch Security Agreements and all security interests created thereunder:

(a) In this Section 11.39: “Dutch Corresponding Debt” shall mean all Secured Obligations of a Loan Party but excluding its Dutch Parallel Debt.

(b) Notwithstanding any other provision of this Agreement or any other Loan Document, each Loan Party hereby irrevocably and unconditionally undertakes insofar as necessary, in advance, to pay to the Collateral Agent, as creditor in its own right and not as representative of the other Secured Parties, sums equal to and in the currency of each amount payable by such Loan Party to each of the Secured Parties as Dutch Corresponding Debt and when that amount falls due for payment under the relevant Loan Document or would have fallen due but for any discharge resulting from failure of another Secured Party to take appropriate steps to preserve its entitlement to be paid that amount (such payment undertakings, obligations and liabilities which are the result thereof, hereinafter referred to as the “Dutch Parallel Debt”).

(c) The Collateral Agent shall have its own independent right to demand payment of the amounts payable by each Loan Party under this Section 11.39, irrespective of any discharge of such Loan Party’s obligation to pay those amounts to the other Secured Parties resulting from failure by them to take appropriate steps to preserve their entitlement to be paid those amounts. For the purpose of this Section 11.39 the Collateral Agent acts in its own name and not as agent, representative or trustee of the Secured Parties and accordingly hold neither its claim resulting from a Dutch Parallel Debt nor any security interests granted by the Security Documents securing a Dutch Parallel Debt on trust.

(d) Any amount due and payable by a Loan Party to the Collateral Agent under this Section 11.39 shall be increased to the extent the Dutch Corresponding Debt is increase and shall be decreased to the extent that the other Secured Parties have received (and are able to retain) payment in full of the Dutch Corresponding Debt and any part of the Dutch Corresponding Debt payable by a Loan Party shall be decreased to the extent that the Collateral Agent has received (and is able to retain) payment in full of the Dutch Parallel Debt.

(e) The Collateral Agent shall apply any amounts received in payment of any Dutch Parallel Debt in accordance with the terms and conditions of this Agreement governing the application of proceeds in payment of any Secured Obligations.

(f) The rights of the Secured Parties (other than any Dutch Parallel Debt) to receive payment of the Dutch Corresponding Debt by each Loan Party are several and are separate and independent from, and without prejudice to, the rights of the Collateral Agent to receive payment under this Section 11.39.

Annex II

Applicable Margin

Average Quarterly Excess Availability	Eurocurrency	EURIBOR	Base Rate
Level I			
Greater than or equal to 50% of the aggregate Commitments	1.25%	1.25%	0.25%
Level II			
Less than 50% and equal to or greater than 33% of the aggregate Commitments	1.50%	1.50%	0.50%
Level III			
Less than 33% of the aggregate Commitments	1.75%	1.75%	0.75%

Until December 31, 2017, the Applicable Margin shall be determined based upon Level II. Thereafter, the Applicable Margin shall be subject to increase or decrease as of the first day of each fiscal quarter based on Average Quarterly Excess Availability for the preceding fiscal quarter. If the first Borrowing Base Certificate in any fiscal quarter is not received by the date required under Section 9.03, then, at the option of the Administrative Agent or Required Lenders, the margins shall be determined as if Level III were applicable, from such day until the first day of the calendar month following actual receipt.

Exhibits

EXHIBIT A

Form of ADMINISTRATIVE QUESTIONNAIRE

[See Attached]

954478.05-CHISR02A - MSW

EXHIBIT A-1

Lender Information Form – Novelis Inc.

Please email completed form to: Kelly MacDevette

Email: kelly.macdevette@wellsfargo.com

Borrower Name: ____

Legal Name of Lender: ____

Swiss Qualifying Bank? ____ Yes ____ No

Specified Foreign Currency Capacity? ____ Yes ____ No

Number of Signatures Required: ____ One ____ Two

Signature Block Information: ____

Signing Credit Agreement: ____ Yes ____ No

Coming in via Assignment: ☐ Yes ☐ No

Signature Block Information: ☐

Signing Credit Agreement: ☐ Yes ☐ No

Coming in via Assignment: ☐ Yes ☐ No

U.S. Currency Address: ☐

☐

☐

Foreign Currency Address: ☐

☐

☐

Lender Contact Information

CREDIT CONTACTS

<u>Primary Contact</u>	<u>Secondary Contact</u>
Name:	
Address:	
Telephone:	
Facsimile:	
E-Mail:	

U.S. OPERATIONS CONTACTS

Primary C

ontact

Secondary Contact

Name:

Address:

Telephone:

Facsimile:

E

-

Mail:

FOREIGN OPERATIONS CONTACTS

<u>Primary Contact</u>	<u>Secondary Contact</u>
Name:	
Address:	
Telephone:	
E-Mail:	

Lender’s Wire Payment Instructions

US & CAN Borrowers – USD

Pay to:

(Name of Bank)	
(ABA #)	
(Account #)	(Account Name)
(Attention)	

US, CAN, UK, CH & GER Borrowers – GBP

Pay to:

(Name of Bank)	
(Swift)	
(IBAN)	(Sort Code)
(Account #)	(Account Name)
(Attention)	

US, CAN, UK, CH & GER Borrowers – EURO

Pay to:

(Name of Bank)	
(Swift)	
(IBAN)	
(Account #)	(Account Name)
(Attention)	

UK, CH & GER Borrowers – USD

Pay to:

(Name of Bank)	
(Swift)	
(IBAN)	
(Account #)	(Account Name)
(Attention)	

Agent Contact Information

CREDIT CONTACTS

	<u>Primary Contact</u>	<u>Secondary Contact</u>
Name:	Daniel Denton	Kristy Loucks
Address:	1100 Abernathy Road Suite 1600 Atlanta, GA 30328	1100 Abernathy Road Suite 1600 Atlanta, GA 30328
Telephone:	770-508-1387	77-508-1333
Facsimile:	855-277-7303	866-351-0046
E-Mail:	Daniel.denton@wellsfargo.com	Kristy.S.Loucks@wellsfargo.com

	<u>Primary Contact</u>	<u>Secondary Contact</u>
Name:	Sondra Davis	Mario Morales
Address:	14241 Dallas Parkway Dallas, TX 75254 #1300	14241 Dallas Parkway Dallas, TX 75254 #1300
Telephone:	972-361-7229	972-361-7295
Facsimile:	866-270-8693	1-866-968-0166
E-Mail:	Sondra.M.Davis@wellsfargo.com	Mario.D.Morales@wellsfargo.com

Agent's Wire Payment Instructions

US Borrowers – USD

Pay to:

Wells Fargo Bank, N.A.

(Name of Bank)
121-000-248

(ABA #)
3723xxxxxxxxxxx

(Account #)
Novelis

(Attention)

Wells Fargo Bank, N.A.
(Account Name)

Canadian Borrowers – USD

Pay to:

TD Canada Trust.

(Name of Bank)
000410202

(Canadian Clearing Code)
TDOMCATTOR Wells Fargo Capital Finance Corporation Canada

(SWIFT #) (Beneficiary)
7387637

(Beneficiary Account Number)

Intermediary Bank for USD payment (only for paying from Non Canadian Bank)

Bank of America NA

(Name of Bank)
026009593

ABA Number NY NY

Bank Address

US, CAN, UK, CH & GER Borrowers – GBP

Pay to:

Wells Fargo Bank, N.A. London

(Name of Bank)
PNBPGB2L

(Swift)
GB76PNBP16567188000418

(IBAN)
88000418

(Account #)
Novelis

(Attention)

16-56-71
(Sort Code)
Wells Fargo Bank, N.A.
(Account Name)

US, CAN, UK, CH & GER Borrowers – EURO

Pay to:

Wells Fargo Bank, N.A. London

(Name of Bank)

PNBPGB2L

(Swift)

GB33PNBP16567188000416

(IBAN)

88000416

Wells Fargo Bank, N.A.

(Account #)

Novelis

(Account Name)

(Attention)

UK, CH & GER Borrowers – USD

Pay to:

Wells Fargo Bank, N.A. London

(Name of Bank)

PNBPGB2L

(Swift)

GB65PNBP16567188000422

(IBAN)

88000422

Wells Fargo Bank, N.A.

(Account #)

Novelis

(Account Name)

(Attention)

Lenders Organizational Structure:

US Corporation: _____ Non-US (Foreign) Corporation: _____

If Foreign, country of incorporation or organization: ____

Lender's Tax Identification Number: ____

Tax withholding Form Attached (See next page)

Failure to properly complete and return the applicable form will subject your institution to withholding tax.

FOR INTERNAL PURPOSES ONLY (FOREIGN INSTITUTIONS)

Patriot Act Certification Effective Date:

Patriot Act Certification Expiration Date:

TAX REPORTING INFORMATION (PLEASE REVIEW THE INFORMATION BELOW AND SUBMIT THE APPROPRIATE IRS TAX FORM ALONG WITH THIS COMPLETED ADMINISTRATIVE DETAILS QUESTIONNAIRE).

Tax Documents

U.S. DOMESTIC INSTITUTIONS:

If your institution is incorporated or organized within the United States, you must complete and return **Form W-9** (Request for Taxpayer Identification Number and Certification). **Please be advised that we request that you submit an original Form W-9.** o Attach Form W-9 for current Tax Year o Confirm Tax ID Number:

FOREIGN INSTITUTIONS:

I. Corporations:

If your institution is incorporated outside of the United States for U.S. federal income tax purposes, and is the beneficial owner of the interest and other income it receives, you must complete one of the following three tax forms, as applicable to your institution:

- a.) Form W8BEN** (Certificate of Foreign Status of Beneficial Owner),
- b.) Form W-8ECI** (Income Effectively Connected to a U.S. Trade or Business),
- c.) Form W-8EXP** (Certificate of Foreign Government or Governmental Agency),
- d.) Form W-8IMY** (Certificate of Foreign Intermediary, Flow-Through Entity, or Certain U.S. Branches).

A U.S. taxpayer identification number is required for any institution submitting Form W-8ECI. It is also required on Form W-8BEN for certain institutions claiming the benefits of a tax treaty with the U.S. Please be advised that U.S. tax regulations do not permit the acceptance of faxed forms. An original tax form must be submitted.

o Attach Form W-8 for current Tax Year o Confirm Tax ID Number:

II. Flow-Through Entities:

If your institution is organized outside the U.S., and is classified for U.S. federal income tax purposes as either a Partnership, Trust, Qualified or Non-Qualified Intermediary, or other non U.S. flow-through entity, an original Form W-8IMY (Certificate of Foreign Intermediary, Foreign Flow-Through Entity, or Certain U.S. Branches for United States Tax Withholding) must be completed by the intermediary together with a withholding statement. Flow-through entities other than Qualified Intermediaries are required to include tax forms for each of the underlying beneficial owners. Please be advised that U.S. tax regulations do not permit the acceptance of faxed forms. **Original tax form(s) must be submitted.**

- o Attach Form W-8 for current Tax Year
- o Confirm Tax ID Number: _____

Pursuant to the language contained in the tax section of the Credit Agreement, the applicable tax form for your institution must be completed and returned prior to the first payment of income. Failure to provide the proper tax form when requested may subject your institution to U.S. tax withholding.

EXHIBIT B

Form of
ASSIGNMENT AND ASSUMPTION

This Assignment and Assumption (the “**Assignment and Assumption**”) is dated as of the Effective Date set forth below and is entered into by and between [Insert name of Assignor] (the “**Assignor**”) and [Insert name of Assignee] (the “**Assignee**”). Capitalized terms used but not defined herein shall have the meanings given to them in the Credit Agreement defined below, receipt of a copy of which is hereby acknowledged by the Assignee. The Standard Terms and Conditions set forth in Annex 1 attached hereto are hereby agreed to and incorporated herein by reference and made a part of this Assignment and Assumption as if set forth herein in full.

For an agreed consideration, the Assignor hereby irrevocably sells and assigns to the Assignee, and the Assignee hereby irrevocably purchases and assumes from the Assignor, subject to and in accordance with the Standard Terms and Conditions and the Credit Agreement, as of the Effective Date inserted by the Administrative Agent as contemplated below, (i) all of the Assignor’s rights and obligations in its capacity as a Lender under the Credit Agreement and any other documents or instruments delivered pursuant thereto to the extent related to the amount and percentage interest identified below of all of such outstanding rights and obligations of the Assignor under the respective facilities identified below (including participations in any Letters of Credit and Swingline Loans included in such facilities) and (ii) to the extent permitted to be assigned under applicable law, all claims, suits, causes of action and any other right of the Assignor (in its capacity as a Lender) against any person, whether known or unknown, arising under or in connection with the Credit Agreement, any other documents or instruments delivered pursuant thereto or the loan transactions governed thereby or in any way based on or related to any of the foregoing, including, but not limited to, contract claims, tort claims, malpractice claims, statutory claims and all other claims at law or in equity related to the rights and obligations sold and assigned pursuant to clause (i) above (the rights and obligations sold and assigned pursuant to clauses (i) and (ii) above being referred to herein collectively as, the “**Assigned Interest**”). Such sale and assignment is without recourse to the Assignor and, except as expressly provided in this Assignment and Assumption, without representation or warranty by the Assignor.

- 1. Assignor: _____
- 2. Assignee: _____
[and is an Affiliate/Approved Fund of [identify Lender]]
- 3. Borrower(s): [Novelis Inc.] [Novelis Corporation] [Novelis Global Employment Organization, Inc.] [Novelis South America Holdings, LLC] [Novelis Acquisitions, LLC] [Novelis Holdings, Inc.] [Novelis UK Ltd] [Novelis AG] [Novelis Deutschland GmbH] [insert name of other applicable Borrower]
- 4. Administrative Agent: Wells Fargo Bank, National Association, as administrative agent under the Credit Agreement
- 5. Credit Agreement: The SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto.
- 6. Assigned Interest:

Facility Assigned	Aggregate Amount of [Revolving Commitments/ Specified Incremental Commitments/	Amount of [Revolving Commitments/ Specified Incremental Commitments/ Revolving Loans]	Percentage Assigned of [Revolving Commitments/ Specified Incremental Commitments/ Revolving Loans]

	Revolving Loans] for all Lenders	Assigned ²	
[U.S. Revolving Loans] [U.S. Swingline Loans] [Swiss Revolving Loans] [U.K. Revolving Loans]	\$	\$	%
[European Swingline Loans][German Revolving Loans][Belgian Revolving Loans]			

7. Swiss Qualifying Bank: Assignee [is][is not] a Swiss Qualifying Bank.
 8. [Trade Date: _____]

Effective Date: _____, 20____ [TO BE INSERTED BY ADMINISTRATIVE AGENT
 AND WHICH SHALL BE THE EFFECTIVE DATE OF RECORDATION OF TRANSFER IN THE REGISTER THEREFOR.]

The terms set forth in this Assignment and Assumption are hereby agreed to:

ASSIGNOR
 [NAME OF ASSIGNOR]

By: _____
 Title:

ASSIGNEE
 [NAME OF ASSIGNEE]

By: _____
 Title:

Consented to and Accepted:

 [[NAME OF DESIGNATED
 COMPANY], as Administrative Borrower]

By: _____
 Name:
 Title:

[[NAME OF EUROPEAN ADMINISTRATIVE BORROWER],
 as European Administrative Borrower]

By: _____
 Name:
 Title:

WELLS FARGO BANK, NATIONAL ASSOCIATION,
 as Administrative Agent

By: _____
 Name: Title:

[WELLS FARGO BANK, NATIONAL ASSOCIATION,
 as U.S. Swingline Lender]

By: _____
 Name:
 Title:

[_____] , as an Issuing Bank

By: _____

Name:

Title:

WELLS FARGO BANK, N.A. (LONDON BRANCH),
as European Swingline Lender

By: _____

Name:

Title:

ANNEX 1 to Assignment and Assumption

NOVELIS INC.
CREDIT AGREEMENT

STANDARD TERMS AND CONDITIONS FOR
ASSIGNMENT AND ASSUMPTION

1. Representations and Warranties.

1.1 Assignor. The Assignor (a) represents and warrants that (i) it is the legal and beneficial owner of the Assigned Interest, (ii) the Assigned Interest is free and clear of any lien, encumbrance or other adverse claim and (iii) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby; and (b) assumes no responsibility with respect to (i) any statements, warranties or representations made in or in connection with the Credit Agreement or any other Loan Document, (ii) the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Documents or any collateral thereunder, (iii) the financial condition of the Loan Parties, any of their Subsidiaries or Affiliates or any other person obligated in respect of any Loan Document or (iv) the performance or observance by the Loan Parties, any of their Subsidiaries or Affiliates or any other person of any of their respective obligations under any Loan Document.

1.2 Assignee. The Assignee (a) represents and warrants that (i) it has full power and authority, and has taken all action necessary, to execute and deliver this Assignment and Assumption and to consummate the transactions contemplated hereby and to become a Lender under the Credit Agreement, (ii) it meets all requirements of an Eligible Assignee under the Credit Agreement (subject to receipt of such consents as may be required under the Credit Agreement), (iii) from and after the Effective Date, it shall be bound by the provisions of the Credit Agreement as a Lender thereunder and, to the extent of the Assigned Interest, shall have the obligations of a Lender thereunder, (iv) it is sophisticated with respect to decisions to acquire assets of the type represented by the Assigned Interest and either it, or the Person exercising discretion in making its decision to acquire the Assigned Interest, is experienced in acquiring assets of such type, (v) it has received a copy of the Credit Agreement, together with copies of the most recent financial statements delivered pursuant to Sections 4.01(e) or 5.01 thereof, as applicable, and such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter into this Assignment and Assumption and to purchase the Assigned Interest on the basis of which it has made such analysis and decision independently and without reliance on the Administrative Agent or any other Lender, (vi) if it is not already a Lender under the Credit Agreement, attached to the

Assignment and Assumption is an Administrative Questionnaire in the form of Exhibit A to the Credit Agreement, (vii) to the extent required by the Credit Agreement, the Administrative Agent has received a processing and recordation fee of \$3,500 as of the Effective Date and (viii) attached to the Assignment and Assumption is any documentation required to be delivered by it pursuant to Section 2.15 of the Credit Agreement, duly completed and executed by the Assignee; (b) agrees that (i) it will, independently and without reliance on any Agent, the Assignor or any other Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Documents, (ii) it will perform in accordance with their terms all of the obligations that by the terms of the Loan Documents are required to be performed by it as a Lender and (iii) it will make or invest in its Commitments and Loans for its own account in the ordinary course and without a view to distribution of such Commitments and Loans within the meaning of the Securities Act or the Exchange Act, or other federal securities laws (it being understood that, subject to the provisions of Sections 2.16(c), 11.02(d) and 11.04 of the Credit Agreement, the disposition of such Commitments and

EXHIBIT B-ANNEX 1-1

Loans or any interests therein shall at all times remain within its exclusive control); and (c) hereby expressly consents to, ratifies (*genehmigt*) and confirms the declarations and acts made by the Collateral Agent on behalf and in the name of the Assignee as Future Pledgee (as defined in the relevant German Security Agreement) in the German Security Agreements. The Assignee confirms that it is aware of the contents of the German Security Agreements.

2. Payments. From and after the Effective Date, the Administrative Agent shall make all payments in respect of the Assigned Interest (including payments of principal, interest, fees and other amounts) to the Assignor for amounts that have accrued to but excluding the Effective Date and to the Assignee for amounts that have accrued from and after the Effective Date.

3. General Provisions. This Assignment and Assumption shall be binding upon, and inure to the benefit of, the parties hereto and their respective successors and assigns. This Assignment and Assumption may be executed by one or more of the parties hereto on any number of separate counterparts, each of which shall be an original, but all of which, taken together, shall constitute one original agreement. Delivery of an executed counterpart of this Assignment and Assumption by facsimile, email or other electronic transmission (including in portable document format (“pdf”) or other similar format) shall be effective as delivery of a manually executed counterpart hereof. This Assignment and Assumption shall be construed in accordance with and governed by, the law of the State of New York without regard to conflicts of principles of law that would require the application of the laws of another jurisdiction.
4. Belgian Security Agreements. It is expressly agreed that for the purpose of Article 1278 and Article 1281 of the Belgian Civil Code, all security interests, as created or evidenced by the Belgian Security Agreements shall be preserved for the benefit of the Collateral Agent, the Assignee, the other Secured Parties and each of the other Loan Parties.

EXHIBIT B-ANNEX 1-2

EXHIBIT C

Form of
BORROWING REQUEST

Wells Fargo Bank, National Association, as Administrative Agent for the Lenders referred to below, 1100 Abernathy Road, Suite 1600
Atlanta, GA 30328
Attention: Account Officer
Fax: 855-260-0212

Re: NOVELIS

[Date]

Ladies and Gentlemen:

Reference is made to the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S.

borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”),

NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the

Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL

ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement. [Administrative Borrower][European Administrative Borrower] hereby gives you notice pursuant to [Section 2.03][Section 2.17(e)] of the Credit Agreement that it requests a Borrowing under the Credit Agreement, and in that connection sets forth below the terms on which such Borrowing is requested to be made:

(A) Borrowing [U.S. Revolving Loans]

[U.S. Swingline Loans]
[U.K. Revolving Loans]
[Swiss Revolving Loans]
[European Swingline Loans]
[German Revolving Loans]
[Belgian Revolving Loans]

(B) Approved Currency of Borrowing

(C) Principal amount of

Borrowing

(D) Date of Borrowing
(which is a Business Day)

(E) Type of Borrowing [Base Rate][EURIBOR Rate][LIBOR
Rate]

(F) Interest Period and the last day thereof

(G) Funds are requested to be disbursed to Borrower’s account with [_____] (Account No.).

[Administrative Borrower][European Administrative Borrower] hereby represents and warrants that the conditions to lending specified in Sections 4.02(b), (c) and (d) of the Credit Agreement are satisfied as of the date hereof.

[Signature Page Follows]

[_____] , as Administrative
Borrower]

By: _____
Name: Title:

[_____] , as European
Administrative Borrower]

By: _____
Name:
Title:

EXHIBIT D Form of COMPLIANCE CERTIFICATE

I, [_____] , the [Financial Officer] of [_____] (in such capacity and not in my individual capacity), hereby certify that, with respect to that certain SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS

INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, "U.S. Swingline Lender"), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, "Administrative Agent") for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, "Collateral Agent") for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, "European Swingline Lender") and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement.:

- (a) Attached hereto as Schedule 1 are detailed calculations demonstrating compliance by Designated Company and its Restricted Subsidiaries with Section 6.10 of the Credit Agreement. Designated Company and its Restricted Subsidiaries are in compliance with Section 6.10 of the Credit Agreement as of the date hereof.
- (b) [Attached hereto as Schedule 2 is the report of [accounting firm.]]
- (c) The Designated Company and its Restricted Subsidiaries were in compliance (to the extent required by the terms thereof) with each of the covenants set forth in Section 6.10 of the Credit Agreement at all times during and since [_____].
- (d) No Default has occurred under the Credit Agreement which has not been previously disclosed, in writing, to the Administrative Agent pursuant to a Compliance Certificate.³
- (e) Attached hereto as Schedule 3 are detailed calculations showing a reconciliation of Consolidated EBITDA (Fixed Charge) to the net income set forth on the statement of income, on a quarterly basis.
- (f) Attached hereto as Schedule 4 are copies of financial statements, consolidated balance sheets, statements of income and cash flows separating out the results of the Designated Company and its Restricted Subsidiaries, on the one hand, and any Unrestricted Subsidiaries, on the other hand.

[Signature Page Follows]

(cont'd from previous page)

³ If a Default shall have occurred, an explanation specifying the nature and extent of such Default shall be provided on a separate page together with an explanation of a corrective action taken or proposed to be taken with respect thereto (include, as applicable, information regarding actions, if any, taken since delivery of the prior Compliance Certificate).

Dated this ____ day of _____, 201__.

By: _____

Name:
Title: [Financial Officer]

SCHEDULE 1

Financial Covenants

[SCHEDULE 2]

[Report of Accounting Firm]
[See attached]

SCHEDULE 3

Reconciliation of Consolidated EBITDA to net income

[See attached]

SCHEDULE 4

Bifurcated Financial Statements

[See attached]

EXHIBIT E

Form of
INTEREST ELECTION REQUEST

Wells Fargo Bank, National Association, as Administrative Agent for the Lenders referred to below, 1100 Abernathy Road, Suite 1600
Atlanta, GA 30328
Attention: Account Officer Fax: 855-260-0212

[Date] Re: Novelis

Ladies and Gentlemen:

This Interest Election Request is delivered to you pursuant to Section 2.08(b) of the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (such term and each other capitalized term used but not defined herein having the meaning given to it in ARTICLE I), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement. The Administrative Borrower hereby requests that on [] (the “**Interest Election Date**”),

1. \$[] of the presently outstanding principal amount of the [U.S. Revolving Loans]
[U.K. Revolving Loans] [Swiss Revolving Loans][German Revolving Loans] [Belgian Revolving Loans] [available/originally made on []], in
[]

2. [and all presently being maintained as/ issued as] [Base Rate Loans] [Eurocurrency Loans] [EURIBOR Loans],
3. be [established as] [converted into] [continued as],
4. [[Eurocurrency Loans] [EURIBOR Loans] having an Interest Period of [one/two/three/six] months].

The undersigned hereby certifies that the following statements are true on the date hereof, and will be true on the proposed Interest Election Date, both before and after giving effect thereto and to the application of the proceeds therefrom:

- (a) the foregoing [conversion] [continuation] complies with the terms and conditions of the Credit Agreement (including, without limitation, Section 2.08 of the Credit Agreement);
- (b) no Default has occurred and is continuing, or would result from such proposed [conversion] [continuation].

[Signature Page Follows]

The Administrative Borrower has caused this Interest Election Request to be executed and delivered by its duly authorized officer as of the date first written above.

[NAME OF DESIGNATED COMPANY], as
Administrative Borrower

By: Name:

Title:

EXHIBIT F

Form of JOINDER AGREEMENT

Reference is made to the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (such term and each other capitalized term used but not defined herein having the meaning given to it in ARTICLE I), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**German Borrower**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Swiss Borrower**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement.

WITNESSETH:

WHEREAS, the Guarantors have entered into the Credit Agreement and the applicable Security Documents in order to induce the Lenders to make the Loans and the Issuing Banks to issue Letters of Credit to or for the benefit of the Borrowers;

[TO JOIN NEW GUARANTORS]

[WHEREAS, pursuant to Section 5.11(b) of the Credit Agreement, [certain Subsidiaries are] required to become Guarantors under the Credit Agreement by executing a Joinder Agreement. The undersigned Subsidiary (the “New Guarantor”) is executing this joinder agreement (“Joinder Agreement”) to the Credit Agreement in order to induce the Lenders to make additional Loans and the Issuing Banks to issue Letters of Credit and as consideration for the Loans previously made by the Lenders and Letters of Credit previously issued by the Issuing Banks and as consideration for the other agreements of the Lenders and the Agents under the Loan Documents.]

[TO JOIN NEW BORROWERS]

[WHEREAS, pursuant to Section 2.20 of the Credit Agreement, the Designated Company may at any time and from time to time after the Aleris Acquisition Closing Date designate one or more Specified Aleris German Subsidiaries as German Borrowers and one or more Specified Aleris U.S. Subsidiaries as U.S. Borrowers. The Designated Company has designated the undersigned Subsidiary (the “New Borrower”) as a [German][U.S.] Borrower, and the undersigned New Borrower is executing this joinder agreement (“Joinder Agreement”) to become a [German Borrower] [U.S. Borrower] under the Credit Agreement.]

[WHEREAS, in connection with the Aleris Acquisition and in accordance with the definition of Specified Aleris Subsidiary, [Aleris Switzerland GmbH, a [limited liability company] organized under the laws of Switzerland] [Aleris Aluminum Duffel BVBA, a [____], organized under the laws of Belgium] (the “New Borrower”) is executing this joinder agreement (“Joinder Agreement”) to become a [Swiss Borrower] [Belgian Borrower] under the Credit Agreement.]

NOW, THEREFORE, the Administrative Agent, the Collateral Agent and the New Guarantor hereby agree as follows:

- 1.**[Joinder of Borrower and] Guarantee.** [In accordance with [the definition of Specified Aleris Subsidiary][Section 2.20 of the Credit Agreement], the New Borrower by its signature below becomes a Borrower under the Credit Agreement with the same force and effect as if originally named therein as a Borrower.] In accordance with [Section 5.11(b)][Section 2.20] of the Credit Agreement, the New [Borrower] [Guarantor] by its signature below becomes a Guarantor under the Credit Agreement with the same force and effect as if originally named therein as a Guarantor.
- 2.**Representations and Warranties.** The New [Borrower][Guarantor] hereby (a) agrees to all the terms and provisions of the Credit Agreement applicable to it as a [Borrower and] Guarantor thereunder and (b) represents and warrants that the representations and warranties made by it as a [Borrower and] Guarantor thereunder are true and correct in all material respects (except that any representation and warranty that is qualified as to “materiality” or “Material Adverse Effect” shall be true and correct in all respects) on and as of the date hereof, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation and warranty that is qualified as to “materiality” or “Material Adverse Effect”, true and correct in all respects) as of such earlier date. Each reference to a [Borrower or a] Guarantor in the Credit Agreement shall be deemed to include the New [Borrower][Guarantor] as the context requires. The New [Borrower] [Guarantor] hereby attaches supplements to each of the schedules to the Credit Agreement and the Perfection Certificates applicable to it.
- 3.**Severability.** Any provision of this Joinder Agreement which is prohibited or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such prohibition or unenforceability without invalidating the remaining provisions hereof, and any such prohibition or unenforceability in any jurisdiction shall not invalidate or render unenforceable such provision in any other jurisdiction.
- 4.**Counterparts.** This Joinder Agreement may be executed by one or more of the parties hereto on any number of separate counterparts, each of which shall be an original, but all of which, taken together, shall constitute one original agreement. Delivery of an executed counterpart of this Joinder Agreement by facsimile, email or other electronic transmission (including in portable document format (“pdf”) or other similar format) shall be effective as delivery of a manually executed counterpart of this Joinder Agreement.
- 5.**No Waiver.** Except as expressly supplemented hereby, the Credit Agreement shall remain in full force and effect.
- 6.**Notices.** All notices, requests and demands to or upon the New [Borrower][Guarantor], any Agent or any Lender shall be governed by the terms of Section 11.01 of the Credit Agreement.
- 7.**Governing Law.** THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAW OF THE STATE OF NEW YORK, WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.

[Signature Pages Follow]

IN WITNESS WHEREOF, the undersigned have caused this Joinder Agreement to be duly executed and delivered by their duly authorized officers as of the day and year first above written.

[NEW BORROWER / NEW GUARANTOR]

By: _____
Name:
Title:

Address for Notices:

WELLS FARGO BANK, NATIONAL ASSOCIATION, as
Administrative Agent and as Collateral Agent

By: _____
Name:
Title:

Address for Notices:

Wells Fargo Bank, National Association, as Administrative Agent for the Lenders referred to below, 1100
Abernathy Road, Suite 1600

Atlanta, GA 30328
Attention: Account Officer
Fax: 855-260-0212

[Note: Schedules to be attached.]

Form of

LANDLORD ACCESS AGREEMENT

[See attached]

EXHIBIT G-1

Exhibit G

LANDLORD'S LIEN WAIVER, ACCESS AGREEMENT AND CONSENT

THIS LANDLORD'S LIEN WAIVER, ACCESS AGREEMENT AND CONSENT (the "Agreement") is made and entered into as of [_____, 201__] by and between _____, having an office at _____ ("Landlord") and WELLS FARGO BANK, NATIONAL ASSOCIATION having an office at 1100 Abernathy Road, Suite 1600, Atlanta, GA 30328, as Collateral Agent (as hereinafter defined), for the benefit of the Secured Parties under the Credit Agreement (as hereinafter defined).

RECITALS:

- A. Landlord is the record title holder and owner of the real property described in Schedule A attached hereto (the "Real Property").
- B. Landlord has leased all or a portion of the Real Property (the "Leased Premises") to [_____] ("Lessee") pursuant to a certain lease agreement or agreements described in Schedule B attached hereto (collectively, and as amended,

amended and restated, supplemented or otherwise modified from time to time, the "Lease").

C. [Lessee]¹ has entered into (i) that certain SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified, the "Credit Agreement"), dated as of October 6, 2014, among the DESIGNATED COMPANY (such term and each other capitalized term used but not defined herein having the meaning given to it in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the "Canadian Borrower"), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an "Initial U.S. Borrower" and, collectively, the "Initial U.S. Borrowers"), NOVELIS

UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 ("U.K. Borrower"), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (Handelsregister) of the local court (Amtsgericht) of Göttingen with registration number HRB 772 ("Novelis Deutschland"), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland ("Novelis AG"), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, "U.S. Swingline Lender"), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, "Administrative Agent") for the Secured Parties and each Issuing Bank, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, "Collateral Agent") for the Secured Parties and each Issuing Bank, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, "European Swingline Lender") and the other party thereto pursuant to which the Lenders have agreed to make certain loans to, among others, [Lessee]² (collectively, the "Loans"), and (ii) that certain Amended and Restated Security Agreement, dated as of May 13, 2013 (as amended, amended and restated, supplemented or otherwise modified from time to

1

Insert name of applicable borrower entities if Lessee is not the borrower under the Credit Agreement and create a defined term "Borrower".

2

Insert "Borrower" if Lessee is not the borrower under the Credit Agreement.

1042936.02A-CHISR01A - MSW

time, the "Security Agreement"), made by Novelis, and the Guarantors from time to time party thereto, in favor of Collateral Agent.

D. [Lessee is a subsidiary of Borrower]³

E. [Lessee has, pursuant to the Credit Agreement among other things guaranteed the obligations of Borrowers under the Credit Agreement and the other Documents evidencing and securing the Loans.]⁴

F. As security for the payment and performance of Lessee's Obligations under the Credit Agreement and the other Loan Documents, Collateral Agent (for its benefit and the benefit of the Secured Parties) has or will acquire a security interest in and lien upon all of Lessee's personal property, inventory, accounts, goods, machinery, equipment, furniture and fixtures (together with all additions, substitutions, replacements and improvements to, and proceeds of, the foregoing, collectively, the "Personal Property") [and a mortgage lien on Lessee's leasehold interest in the Leased Premises.]⁵

G. Collateral Agent has requested, pursuant to its rights under the Credit Agreement and the Security Agreement, that Landlord execute this Agreement.

AGREEMENT:

NOW, THEREFORE, for and in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Landlord hereby represents, warrants and agrees in favor of Collateral Agent, as follows:

1. Landlord hereby waives and releases unto Collateral Agent (i) any contractual landlord's lien and any other landlord's lien which it may be entitled to at law or in equity against any Personal Property, (ii) any and all rights granted by or under any present or future laws to levy or distrain for rent or any other charges which may be due to the Landlord against the Personal Property and (iii) any and all claims, liens and demands of every kind which it has or may hereafter have against the Personal Property (including, without limitation, any right to include the Personal Property in any secured financing Landlord may become party to). Landlord acknowledges that the Personal Property is and will remain personal property and not fixtures even though it may be affixed to or placed on the Real Property.

2. Landlord certifies that (i) Landlord is the landlord under the Lease described in Schedule B attached hereto, (ii) the Lease is in full force and effect and has not been amended, restated, supplemented, extended, renewed or otherwise modified except as set forth in Schedule B hereto, (iii) there is no defense, offset, claim or counterclaim by or in favor of Landlord against Lessee under the Lease or against the obligations of Landlord under the Lease and (iv) no notice of default has been given under or in connection with the Lease which has not been cured, and Landlord has no knowledge of any occurrence of any other default under or in connection with the Lease, (v) Lessee is in possession of the

Leased Premises, (vi) the current monthly base rent under the Lease is \$_____ per month, such _____

3
Delete this recital if Lessee is a borrower under the Credit Agreement.

4
Delete this recital if Lessee is a borrower under the Credit Agreement.

5
Include bracketed language if Leased Premises are to be mortgaged.

monthly base rent due under the Lease has been paid through _____, (vii) additional rent is \$_____ and has been paid through _____, (viii) common area charges are \$_____ and have been paid through _____, (ix) there are no other agreements, whether oral or written, between Lessee and Lessor concerning the Real Property or the Leased Premises, (x) any improvements required by the terms of the Lease to be made by lessee have been completed to the satisfaction of Landlord, and Lessee's current use and operating of the Leased Premises complies with any use covenants or operating requirements contained in the Lease, (xi) Landlord is the record and beneficial owner of the Leased Premises, and the Lease is not subordinate, and has not been subordinated by Landlord, to any mortgage, lien or other encumbrance, (xii) Landlord has not assigned, conveyed, transferred, sold, encumbered or mortgaged its interest in the Lease or the Real Property, and there are no mortgages, deeds of trust or other security interests encumbering Landlord's fee interest in the Leased Premises, (xiii) Landlord has not received written notice of any pending eminent domain proceedings or other governmental actions or any judicial actions of any kind against Landlord's interest in the Real Property, and (xiv) Landlord, and the person or persons executing this certificate on behalf of Landlord, have the power and authority to execute this Agreement.

3. Landlord agrees that Collateral Agent has the right to remove the Personal Property from the Leased Premises at any time prior to the occurrence of a default under the Lease and, after the occurrence of such a default, during the Standstill Period (as hereinafter defined) provided that Collateral Agent shall repair any damage arising from such removal. Landlord further agrees that, during the foregoing periods, Landlord will not (i) remove any of the Personal Property from the Leased Premises or (ii) hinder Collateral Agent's actions in removing Personal Property from the Leased Premises or Collateral Agent's actions in otherwise enforcing its security interest in the Personal Property. Collateral Agent shall not be liable for any diminution in value of the Leased Premises caused by the absence of Personal Property actually removed or by the need to replace the Personal Property after such removal. Landlord acknowledges that Collateral Agent shall have no obligation to remove the Personal Property from the Leased Premises.

4. Landlord acknowledges and agrees that Lessee's granting of a security interest in the Personal Property [and the granting of a mortgage lien in and upon Lessee's interest in the Leased Premises, in each case,]⁶ in favor of Collateral Agent (for its benefit and the benefit of the Secured Parties) shall not constitute a default under the Lease nor permit Landlord to terminate the Lease or reenter or repossess the Leased Premises or otherwise be the basis for the exercise of any remedy by Landlord and Landlord hereby expressly consents to the granting of such security interest [and mortgage lien.]⁷

5. Notwithstanding anything to the contrary contained in this Agreement or the Lease, in the event of a default by Lessee under the Lease, Landlord agrees that (i) it shall provide to Collateral Agent at the address set forth in the introductory paragraph hereof a copy of any notice of default delivered to Lessee under the Lease and (ii) it shall not exercise any of its remedies against Lessee provided in favor of Landlord under the Lease or at law or in equity until, in the case of a monetary default, the date which is 45 days after the date Landlord delivers written notice of such monetary default to Collateral Agent, and in the case of a non-monetary default, the date which is 60 days after the date Landlord delivers written notice of such non-monetary default to Collateral Agent (such 45-day period for _____)

6
Include bracketed language if Leased Premises are to be mortgaged.

7
Include bracketed language if Leased Premises are to be mortgaged.

monetary defaults and such 60 day period for non-monetary defaults, as applicable, being referred to as the "Standstill Period"), provided, however, if such non-monetary default by its nature cannot reasonably be cured by Collateral Agent within such 60 day period, Collateral Agent shall have such additional period of time as may be reasonably necessary to cure such non-monetary default, so long as Lessee commences such curative measures within such 60 day period and thereafter proceeds diligently to complete such curative measures. In the event that any such non-monetary default by its nature cannot reasonably be cured by Collateral Agent, Landlord shall, provided Collateral Agent has theretofore cured all monetary defaults (if any), upon the request of Collateral Agent enter into a new lease with Collateral Agent (or its nominee) on the same terms and conditions as the Lease. Collateral Agent shall have the right, but not the obligation, during the Standstill Period, to cure any such default and Landlord shall accept any such cure by Collateral Agent or Lessee. If, during the Standstill Period, Collateral Agent or Lessee or any other Person cures any such default, then Landlord shall rescind the notice of default.

6. In the event of a termination, disaffirmance or rejection of the Lease for any reason, including, without limitation, pursuant to any laws (including any bankruptcy or other insolvency laws) by Lessee or the termination of the Lease for any reason by Landlord, Landlord will give Collateral Agent the right, within sixty (60) days of such event, provided all monetary defaults under the Lease have been cured, to enter into a new lease of the Leased Premises, in the name of Collateral Agent (or a designee to be named by Collateral Agent at the time), for the remainder of the term of the Lease and upon all of the terms and conditions thereof, or, if Collateral Agent shall elect not to exercise such right (such election to be made by Collateral Agent at its sole discretion), Landlord will give Collateral Agent the right to enter upon the Leased Premises during such sixty (60) day period for the purpose of removing Tenant's personal property therefrom.

7. Notwithstanding any provision to the contrary contained in the Lease, any acquisition of Lessee's interest by Collateral Agent, its nominee, shall not create a default under, or require Landlord's consent under, the Lease.

8. The terms and provisions of this Agreement shall inure to the benefit of and be binding upon the successors and assigns of Landlord (including, without limitation, any successor owner of the Real Property) and Collateral Agent. Landlord will disclose the terms and conditions of this Agreement to any purchaser or successor to Landlord's interest in the Leased Premises. Notwithstanding that the

provisions of this Agreement are self-executing, Landlord agrees, upon request by Collateral Agent, to execute and deliver a written acknowledgment confirming the provisions of this Agreement in form and substance satisfactory to Collateral Agent.

9. All notices to any party hereto under this Agreement shall be in writing and sent to such party at its respective address set forth above (or at such other address as shall be designated by such party in a written notice to the other party complying as to delivery with the terms of this Section 9) by certified mail, postage prepaid, return receipt requested or by overnight delivery service.

10. The provisions of this Agreement shall continue in effect until Landlord shall have received Collateral Agent's written certification that the Loans have been paid in full and all of Lessee's other Obligations under the Credit Agreement and the other Loan Documents have been satisfied.

11. THE INTERPRETATION, VALIDITY AND ENFORCEMENT OF THIS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED UNDER THE LAW OF THE STATE OF NEW YORK, WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAW PRINCIPLES THEREOF THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.

12. Landlord agrees to execute, acknowledge and deliver such further instruments as Collateral Agent may request to allow for the proper recording of this Agreement (including, without limitation, a revised landlord's waiver in form and substance sufficient for recording) or to otherwise accomplish the purposes of this Agreement.

13. Landlord agrees that, so long as the Loans and Lessee's Obligations under the Credit Agreement remain outstanding and Collateral Agent retains an interest in the Personal Property

[and/or Lessee's interest in the Leased Premises]⁸, no modification, alteration or amendment shall be made to the Lease without the prior written consent of Collateral Agent if such modification, alteration or amendment could have a material adverse effect on the value or use of the Leased Premises or Lessee's obligations or rights under the Lease.

[Signature Page Follows.]

⁸
Include bracketed language if Leased Premises are to be mortgaged.

IN WITNESS WHEREOF, Landlord and Collateral Agent have caused this Agreement to be duly executed and delivered by their duly authorized officers as of the date first above written.

_____, as Landlord

By:

Name:

Title:

WELLS FARGO BANK, NATIONAL ASSOCIATION,
as Collateral Agent

By:

Name:

Title:

Schedule A Description of Real Property.

Schedule B

Description of Leases

Location/

Lessor Lessee Dated Modification Property Address

Form of
LC REQUEST

Dated [____]

WELLS FARGO BANK, NATIONAL ASSOCIATION, as Administrative Agent under the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement.

[NAME AND ADDRESS OF ISSUING BANK]

Ladies and Gentlemen:

We hereby request that [NAME OF ISSUING BANK], as Issuing Bank under the Credit Agreement [issue] [amend] [renew] [extend] [a] [an existing] [Standby] [Commercial] Letter of Credit for the account of the undersigned [____] on [____]²⁵ (the “Date of [Issuance] [Amendment] [Renewal] [Extension]”) in the aggregate stated amount of [____]. [Such Letter of Credit was originally issued on [date].] The requested Letter of Credit [shall be] [is] denominated in Approved Currency.

The beneficiary of the requested Letter of Credit [will be] [is] [____], and such Letter of Credit [will be] [is] in support of [____] and [will have] [has] a stated expiration date of [____]. [Describe the nature of the amendment, renewal or extension.] We hereby certify that:

EXHIBIT H-1

- (1)As of the date first set forth above and at the time of and immediately after giving effect to the [issuance] [amendment] [renewal] [extension] of the Letter of Credit requested herein, no Default has or will have occurred and be continuing.
- (2)Each of the representations and warranties made by any Loan Party set forth in any Loan Document are true and correct in all material respects (except that any representation and warranty that is qualified as to “materiality” or “Material Adverse Effect”, is true and correct in all respects) on and as of such date and with the same effect as though made on and as of the date first set forth above, except to the extent such representations and warranties expressly relate to an earlier date, in which case such representation and warranty shall have been true and correct in all material respects (or, in the case of any representation and warranty that is qualified as to “materiality” or “Material Adverse Effect”, true and correct in all respects) as of such earlier date.
- (3)No order, judgment or decree of any Governmental Authority purports to restrain any Lender from taking any actions to be made hereunder or from making any Loans to be made by it. No injunction or other restraining order has been issued, is pending or noticed with respect to any action, suit or proceeding seeking to enjoin or otherwise prevent the consummation of, or to recover any damages or obtain relief as a result of, the transactions contemplated by this LC Request, the Credit Agreement or the making of Loans thereunder.
- (4)After giving effect to the request herein, the Loan Parties shall be in compliance with the Funding Conditions and the LC Conditions, (iii) no Overadvance exists and (iv) the conditions set forth in Section 4.02 of the Credit Agreement in respect of such issuance, amendment, renewal or extension shall have been satisfied.

(cont'd from previous page)

Copies of all relevant documentation with respect to the supported transaction are attached hereto.

[]

By: _____

Name:

Title:

[_____, as Administrative
Borrower]

By: _____

Name:

Title:

[_____, as European

EXHIBIT H-2

Administrative Borrower]

By: _____
Name:
Title:

EXHIBIT H-3

Form of
BORROWING BASE CERTIFICATE

Wells Fargo Bank, National Association



Customer Name:	
Report #	
Report Date:	

ETROUSD	
GBPUUSD	
CHPUUSD	
CADUSD	

ACCOUNTS RECEIVABLE	
Collateral	
1. Beginning Balance	
2. Sales (+)	
3. Credit Memos (-)	
4. Adjustments (+)	
5. Adjustments (-)	
6. Net Collections-Includes Non A/R Cash (-)	
7. Discounts (-)	
8. Non A/R Cash (+)	
9. Unapplied Cash (-)	
10. Current Balance	
11. Dilutive Reserve	
12. Ineligible	
13. Factored Receivables (some of which is already excluded from Current Balance)	
14. Exclusion due to Excess Account Debtor Concentration	
15. Eligible Collateral (10-11-12-13)	
16. Eligible A/R @ 85% and 70%	
17. AR Availability	

INVENTORY	
Collateral	
1. Beginning Balance	
2. Purchases (+)	
3. Sales (-)	
4. Current Balance	
5. Ineligibles	
6. Eligible Collateral (4-5)	
7. Eligible Inventory	
8. Less Inventory Reserves	
9. Less Rent Reserves	
10. Inventory Available for Advances	
11. Inventory Availability	

GROSS BORROWING BASE	
Gross Availability (Line AR16, I#11)	-
Less Amount Over European Availability Cap	-
Total Availability (Line AR16, I#11)	-

REVOLVING LOAN BALANCE	
1. Beginning Balance	
2. Cash (Checks/ACH) (-)	
3. Cash (Wire) (-)	
4. Adjustments (+/-) (circle one)	
5. Advance (+)	
6. Current Revolving Loan Balance @	
Total Credit Line	
Term Loan Cap	
Total Availability	
Less Total Revolving Loan Balance	
Less Letters of Credit	
Less Reserves	
Excess Availability	

The undersigned hereby represents and warrants to Wells Fargo Bank, National Association ("WFB"), as Administrative and Collateral Agent, that the information set forth herein is true and correct as of the date made, that any Accounts Receivable or Inventory classified as "Eligible A/R" or "Eligible Inventory" conforms in all respects to the respective definitions of "Eligible Account" and "Eligible Inventory" as set forth in the Second Amended and Restated Credit Agreement (dated as of October 6, 2014) entered into by and between WFB, Lenders and the undersigned, as amended, modified or supplemented from time to time.

Prepared by:

Reviewed by:

Authorized Signature:

Date:

Approver:

Form of
REVOLVING NOTE

\$ _____ New York, New York
[Date]

FOR VALUE RECEIVED, each of the undersigned (“**Borrower**”), hereby unconditionally promises to pay to [_____] or its registered assigns (the “**Lender**”) on the Maturity Date (as defined in the Credit Agreement referred to below), in Dollars (in the case of the portion of the principal amount hereof attributable to Dollar Denominated Loans of the Lender), Euros (in the case of the portion of the principal amount hereof attributable to Euro Denominated Loans of the Lender) or GBP (in the case of the portion of the principal amount hereof attributable to GBP Denominated Loans of the Lender), as applicable, and in immediately available funds, the principal amount of the aggregate unpaid principal amount of all Revolving Loans of the Lender outstanding under the Credit Agreement (it being expressly understood that the Dollar Equivalent of the principal amount of this Note may exceed the face amount of this Note stated above). Borrower further agrees to pay interest in Dollars (in the case of the portion of the principal amount hereof attributable to Dollar Denominated Loans of the Lender), Euros (in the case of the portion of the principal amount hereof attributable to Euro Denominated Loans of the Lender) or GBP (in the case of the portion of the principal amount hereof attributable to GBP Denominated Loans of the Lender), as applicable, and in immediately available funds, at such office specified in Section 2.14 of the Credit Agreement on the unpaid principal amount hereof from time to time from the date hereof at the rates, and on the dates, specified in Section 2.06 of such Credit Agreement.

The holder of this Note may endorse and attach a schedule to reflect the date, Type, currency and amount of each Revolving Loan of the Lender owing by the Borrower outstanding under the Credit Agreement, the date and amount of each payment or prepayment of principal hereof, and the date of each interest rate conversion or continuation pursuant to Section 2.08 of the Credit Agreement and the principal amount subject thereto; *provided* that the failure of the Lender to make any such recordation (or any error in such recordation) shall not affect the obligations of Borrower hereunder or under the Credit Agreement.

This Note is one of the Notes referred to in the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the

Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity,

EXHIBIT K-1-1

“**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and

This Note is secured and guaranteed as provided in the Credit Agreement and the Security Documents. Reference is hereby made to the Credit Agreement and the Security Documents for a description of the properties and assets in which a security interest has been granted, the nature and extent of the security and guarantees, the terms and conditions upon which the security interest and each guarantee was granted and the rights of the holder of this Note in respect thereof.

Upon the occurrence of any one or more of the Events of Default specified in the Credit Agreement, all amounts then remaining unpaid on this Note shall become, or may be declared to be, immediately due and payable, all as provided therein. No failure in exercising any rights hereunder or under the other Loan Documents on the part of the Lender shall operate as a waiver of such rights.

Time is of the essence in respect of this Note.

THIS NOTE MAY NOT BE TRANSFERRED EXCEPT IN COMPLIANCE WITH THE TERMS OF THE CREDIT AGREEMENT. TRANSFERS OF THIS NOTE MUST BE RECORDED IN THE REGISTER MAINTAINED BY THE ADMINISTRATIVE AGENT PURSUANT TO THE TERMS OF THE CREDIT AGREEMENT.

[Signature Page Follows]

By: _____ Name: _____
Title: _____

NOVELIS SOUTH AMERICA HOLDINGS, LLC, as a Borrower

By: _____
Name:

Title:

NOVELIS ACQUISITIONS, LLC, as a Borrower

By: _____
Name:

Title:

NOVELIS HOLDINGS, INC., as a Borrower

By: _____
Name:

Title:

NOVELIS CORPORATION, as a Borrower

By: _____
Name:
Title:

NOVELIS GLOBAL EMPLOYMENT
ORGANIZATION, INC., as a Borrower

By: _____
Name:
Title:

NOVELIS UK LTD,
as a Borrower

Title: By: Name:

EXHIBIT K-1-3

NOVELIS AG, as a Borrower

By: _____
Name:
Title:

NOVELIS DEUTSCHLAND GMBH, as a Borrower

By: _____
Name:
Title:

EXHIBIT K-1-4

[ALERIS SWITZERLAND GMBH, as a Borrower

By: _____ Name: _____
Title: _____

ALERIS DEUTSCHLAND HOLDING GMBH, as a Borrower

By: _____
Name: _____
Title: _____

ALERIS ALUMINUM DUFFEL BVBA, as a Borrower

By: _____
Name: _____
Title:] [_____, as a Borrower

By: _____ Name: _____
Title: _____

EXHIBIT K-2

Form of
EUROPEAN SWINGLINE NOTE

\$ _____ New York, New York
[Date]

FOR VALUE RECEIVED, the undersigned, [insert European Borrower name], a[n] [insert entity type] (“**Borrower**”), hereby promises to pay to [_____] or its registered assigns (the “**Lender**”) on the Maturity Date (as defined in the Credit Agreement referred to below), in Euros (in the case of the portion of the principal amount hereof attributable to Euro Denominated Loans of the Lender), GBP (in the case of the portion of the principal amount hereof attributable to GBP Denominated Loans of the Lender) or Swiss francs (in the case of the portion of the principal amount hereof attributable to Swiss Franc Denominated Loans of the Lender), as applicable, and in immediately available funds, the principal amount of the aggregate unpaid principal amount of all European Swingline Loans made by Lender to the undersigned pursuant to Section 2.17 of the Credit Agreement referred to below (it being expressly understood that the Dollar Equivalent of the principal amount of this Note may exceed the face amount of this Note stated above). Borrower further agrees to pay interest in Euros (in the case of the portion of the principal amount hereof attributable to Euro Denominated Loans of the Lender), GBP (in the case of the portion of the principal amount hereof attributable to GBP Denominated Loans of the Lender) or Swiss francs (in the case of the portion of the principal amount hereof attributable to Swiss Franc Denominated Loans of the Lender), as applicable, and in immediately available funds, at such office specified in Section 2.17(f) of the Credit Agreement on the unpaid principal amount hereof from time to time from the date hereof at the rates, and on the dates, specified in Section 2.06 of the Credit Agreement.

The holder of this Note may endorse and attach a schedule to reflect the date, Type, currency and amount of each Swingline Loan of the Lender outstanding under the Credit Agreement and the date and amount of each payment or prepayment of principal thereof; *provided* that the failure of the Lender to make any such recordation (or any error in such recordation) shall not affect the obligations of Borrower hereunder or under the Credit Agreement.

This Note is one of the Notes referred to in that certain SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as

collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto, and is subject to the provisions thereof and is subject to optional and mandatory prepayment in whole or in part as provided therein. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement unless the context otherwise requires.

This Note is secured and guaranteed as provided in the Credit Agreement and the Security Documents. Reference is hereby made to the Credit Agreement and the Security Documents for a description of the properties and assets in which a security interest has been granted, the nature and extent of the security and guarantees, the terms and conditions upon which the security interest and each guarantee was granted and the rights of the holder of this Note in respect thereof.

The limitations pursuant to Article VII of the Credit Agreement apply *mutatis mutandis* to this Note.

Upon the occurrence of any one or more of the Events of Default specified in the Credit Agreement, all amounts then remaining unpaid on this Note shall become, or may be declared to be, immediately due and payable, all as provided therein. No failure in exercising any rights hereunder or under the other Loan Documents on the part of the Lender shall operate as a waiver of such rights.

All parties now and hereafter liable with respect to this Note, whether maker, principal, surety, guarantor, endorser or otherwise, hereby waive diligence, presentment, demand, protest and all other notices of any kind.

Time is of the essence in respect of this Note.

THIS NOTE MAY NOT BE TRANSFERRED EXCEPT IN COMPLIANCE WITH THE TERMS OF THE CREDIT AGREEMENT. TRANSFERS OF THIS NOTE MUST BE RECORDED IN THE REGISTER MAINTAINED BY THE ADMINISTRATIVE AGENT PURSUANT TO THE TERMS OF THE CREDIT AGREEMENT.

THIS NOTE SHALL BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICTS OF LAW PRINCIPLES THAT WOULD REQUIRE THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION.

[Signature Page Follows]

[_____], as a Borrower

By: _____
Name:
Title:

PERFECTION CERTIFICATE

[See attached]

EXHIBIT L-1-1

EXHIBIT L-2

PERFECTION CERTIFICATE SUPPLEMENT

This Perfection Certificate Supplement, dated as of [], 201[] is delivered [pursuant to Section 5.01(e) of] [in connection with a Joinder Agreement, dated even herewith, to] that certain SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity, “**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto.

The undersigned hereby certify to the Administrative Agent, the Collateral Agent and each of the other Secured Parties that, as of the date hereof, there has been no change in the information described in the Perfection Certificate delivered on the Closing Date (as supplemented by any perfection certificate supplements delivered prior to the date hereof, the “**Prior Perfection Certificate**”), other than as follows:

1. Names. (a) Except as listed on **Schedule 1(a)** attached hereto and made a part hereof, (x) **Schedule 1(a)** to the Prior Perfection Certificate sets forth the exact legal name of each Loan Party, as such name appears in its respective certificate or articles of incorporation, memorandum or articles of association, or any other organizational document; (y) each Loan Party is (i) the type of entity disclosed next to its name in **Schedule 1(a)** to the Prior Perfection Certificate, (ii) organized under the laws of the jurisdiction disclosed next to its name in **Schedule 1(a)** to the Prior Perfection Certificate and (iii) a registered organization in such jurisdiction except to the extent disclosed in **Schedule 1(a)** to the Prior Perfection Certificate; and (z) set forth in **Schedule 1(a)** to the Prior Perfection Certificate is the organizational identification number, if any, of each Loan Party that is a registered organization, the United States Federal Employer Identification Number (or equivalent under the laws of the relevant jurisdiction of organization of such Loan Party) of each Loan Party.

(b) Except as listed on **Schedule 1(b)** attached hereto and made a part hereof, set forth in **Schedule 1(b)** of the Prior Perfection Certificate is any other corporate or organizational names each Loan Party has had in the past five years, together with the date of the relevant change.

(c) Except as listed on **Schedule 1(c)** attached hereto and made a part hereof, set forth in **Schedule 1(c)** of the Prior Perfection Certificate is (i) a list of all other names (including trade names or similar appellations) used by each Loan Party, or any other business or organization to which each Loan Party became the successor by merger, consolidation, acquisition, change in form, nature or jurisdiction of organization or otherwise, at any time in the past five years and (ii) the information required by Section 1 of this certificate for any other business or organization to which each Loan Party became the successor by merger, consolidation, acquisition, change in form, nature or jurisdiction of organization or otherwise, at any time in the past five years. Except as set forth in **Schedule 1(c)** attached hereto and made a part hereof and on **Schedule 1(c)** of the Prior Perfection Certificate, no Loan Party has changed its jurisdiction of organization at any time during the past four months.

2. **Current Locations.** (a) Except as listed on **Schedule 2(a)** attached hereto and made a part hereof, the chief executive office of each Loan Party is located at the address set forth in **Schedule 2(a)** of the Prior Perfection Certificate.

(b) Except as listed on **Schedule 2(b)** attached hereto and made a part hereof, set forth in **Schedule 2(b)** of the Prior Perfection Certificate are all locations where each Loan Party maintains any books or records relating to any Collateral.

(c) Except as listed on **Schedule 2(c)** attached hereto and made a part hereof, set forth in **Schedule 2(c)** of the Prior Perfection Certificate are all the other places of business of each Loan Party.

(d) Except as listed on **Schedule 2(d)** attached hereto and made a part hereof, set forth in **Schedule 2(d)** of the Prior Perfection Certificate are all other locations where each Loan Party maintains any of the Collateral consisting of inventory or equipment not identified above where such Collateral owned by the Loan Parties at each such location exceeds \$500,000, provided that the aggregate value of such Collateral owned by the Loan Parties at each such location does not exceed \$2,500,000 in the aggregate.

(e) Except as listed on **Schedule 2(e)** attached hereto and made a part hereof, set forth in **Schedule 2(e)** of the Prior Perfection Certificate are the names and addresses of all persons or entities other than each Loan Party, such as lessees, consignees, warehousemen or purchasers of chattel paper, which have possession or are intended to have possession of any of the Collateral consisting of instruments, chattel paper, inventory or equipment where the value of such Collateral in the possession of each person or such entity exceeds \$500,000, provided that the aggregate value of such Collateral in the possession of each person or such entity does not exceed \$2,500,000 in the aggregate.

3. [Intentionally omitted].

4. **Extraordinary Transactions.** Except for those purchases, acquisitions and other transactions described on **Schedule 4** attached hereto and on **Schedule 4** to the Prior Perfection

Certificate,, all of the Collateral has been originated by each Loan Party in the ordinary course of business or consists of goods which have been acquired by such Loan Party in the ordinary course of business from a person in the business of selling goods of that kind.

5. [Intentionally omitted].

6. Collateral Filings. Except as listed on Schedule 6 attached hereto and made a part hereof, the financing statements, mortgages, charges and other filings (collectively, “**Collateral Filings**”), in each case, duly authorized by each Loan Party constituting the debtor (or the equivalent thereof under the laws of each relevant jurisdiction), including the indications of the collateral relating to the applicable Security Agreement or the applicable Mortgage or other applicable Security Document, are set forth in Schedule 6 of the Prior Perfection Certificate and are in the appropriate forms for filing in the filing offices in the jurisdictions identified in Schedule 7 hereto and thereto.

7. Schedule of Filings. Except as listed on Schedule 7 attached hereto and made a part hereof, attached to the Prior Perfection Certificate as Schedule 7 is a schedule of (i) the appropriate filing offices for the Collateral Filings attached hereto and thereto as Schedule 6 and (ii) the appropriate filing offices for the filings described in Schedule 12 hereto and thereto and (iii) any other actions required to create, preserve, protect and perfect the security interests in the Collateral granted to the Collateral Agent and/or the Lenders and other Secured Parties under the Security Documents (other than the Mortgages) (the “**Pledged Collateral**”). No other filings or actions are required to create, preserve, protect and perfect such security interests in the Pledged Collateral.

8. Real Property. Except as listed on Schedule 8(a) attached hereto and made a part hereof, Schedule 8(a) to the Prior Perfection Certificate is a list of all real property owned or leased by each Loan Party noting Mortgaged Property as of the Closing Date and filing offices for Mortgages as of the Closing Date. Except as described on Schedule 8(b) attached hereto, no Loan Party has entered into any leases, subleases, tenancies, franchise agreements, licenses or other occupancy arrangements as owner, lessor, sublessor, licensor, franchisor or grantor with respect to any of the real property described on Schedule 8(a) or Schedule 8(a) of the Prior Perfection Certificate, other than those listed on Schedule 8(b) of the Prior Perfection Certificate, and no Loan Party has any Leases which require the consent of the landlord, tenant or other party thereto to the Transactions.

9. [Intentionally Omitted]

10. Equity Ownership and Other Equity Investments. Except as listed on Schedule 10(a) attached hereto and made a part hereof, Schedule 10(a) to the Prior Perfection Certificate is a true and correct list of all of the authorized, and the issued and outstanding, stock, shares, partnership interests, limited liability company membership interests or other equity interests of each Loan Party and its Subsidiaries and the record and beneficial owners of such stock, shares, partnership interests, limited liability company membership interests or other equity interests, the number of shares or other equity interests owned by each such Loan Party or Subsidiary and its percentage ownership, the number of shares or other equity interests outstanding, the numbers of any certificate representing such stock, shares, partnership interests, limited liability company membership interests or other equity interests, and the number of shares or other equity interests covered by all outstanding options, warrants, rights of conversion or purchase and similar rights in respect of any such stock, shares, partnership interests, limited liability company membership interests or other equity interests. Except as set forth on Schedule 10(b) attached hereto and made a part hereof, Schedule 10(b) to the Prior Perfection Certificate sets forth each equity investment of each Loan Party that represents 50% or less of the equity of the entity in which

such investment was made. Except as set forth on **Schedule 10** attached hereto and made a part hereof, set forth on **Schedule 10** to the Prior Perfection Certificate is a true and correct organizational structure chart with respect to the Loan Parties and their respective Subsidiaries as of the date hereof.

11. **Instruments and Tangible Chattel Paper; Advances.** (b) Except as listed on **Schedule 11(a)** attached hereto and made a part hereof, **Schedule 11(a)** to the Prior Perfection Certificate is a true and correct list of all promissory notes, instruments (other than checks to be deposited in the ordinary course of business), tangible chattel paper, electronic chattel paper and other evidence of indebtedness held by a Loan Party in excess of \$100,000 in aggregate principal amount.

Except as listed on **Schedule 11(b)** attached hereto and made a part hereof, **Schedule 11(b)** to the Prior Perfection Certificate is a true and correct list of all loans and advances made by any Company to any Company as of the date hereof, which advances will be on and after the date hereof evidenced by one or more Intercompany Notes and, in the case of a loan or advance by a Loan Party, pledged by such Loan Party as Collateral pursuant to the Security Documents.

12. **Intellectual Property.** (a) Except as listed on **Schedule 12(a)** attached hereto and made a part hereof, **Schedule 12(a)** to the Prior Perfection Certificate is a schedule setting forth all of each Loan Party's currently active applications and registrations for Patents and Trademarks (each as defined in the U.S. Security Agreement) and all licenses with respect to Patents and Trademarks of (or licensed by) each Loan Party, including the name of the registered owner and the registration number, or their equivalents in non-U.S. jurisdictions, if any, of each such Patent, Trademark and license with respect to Patents and Trademarks of (or licensed by) each Loan Party.

(b) Except as listed on **Schedule 12(b)** attached hereto and made a part hereof, **Schedule 12(b)** to the Prior Perfection Certificate is a schedule setting forth all of each Loan Party's currently active applications and registrations for Copyrights (as defined in the U.S. Security Agreement) and licenses with respect to Copyrights of (or licensed by) each Loan Party, except for licenses relating to commercially available software used by each Loan Party having a replacement value of less than \$100,000, including the name of the registered owner and the registration number, or their equivalents in non-U.S. jurisdictions, if any, of each such Copyright or license with respect to Copyrights of (or licensed by) each Loan Party.

(c) Except as listed on **Schedule 12(c)** attached hereto and made a part hereof, attached to the Prior Perfection Certificate as **Schedule 12(c)** in proper form for filing with the United States Patent and Trademark Office and United States Copyright Office, or their equivalents in non-U.S. jurisdictions, if any, are the filings necessary to preserve, protect, perfect and record the security interests in the currently active applications and registrations for Trademarks, Patents and Copyrights and licenses with respect to Trademarks, Patents and Copyrights set forth on **Schedule 12(a)** and **Schedule 12(b)** hereto and thereto for which a Loan Party is a registered owner, including duly signed copies of each of the Patent Security Agreement, Trademark Security Agreement and the Copyright Security Agreement, or their equivalents in non-U.S. jurisdictions, as applicable.

13. **Commercial Tort Claims.** Except as listed on **Schedule 13** attached hereto and made a part hereof, attached to the Prior Perfection Certificate as **Schedule 13** is a true and correct list of all Commercial Tort Claims (as defined in the U.S. Security Agreement) other than Commercial Tort Claims which do not exceed \$1,000,000 in the aggregate for all Loan Parties, held by each Loan Party, including a brief description thereof.

14. **Deposit Accounts, Securities Accounts and Commodity Accounts.** Except as listed on

Schedule 14 attached hereto and made a part hereof, attached to the Prior Perfection Certificate as **Schedule 14** is a true and complete list of all Deposit Accounts (other than Excluded Deposit Accounts), Securities Accounts (other than Excluded Securities Accounts) and Commodity Accounts (other than Excluded Commodities Accounts) (each as defined in the U.S. Security Agreement) maintained by each Loan Party, including the name of each institution where each such account is held, the name and account number of each such account and the name of each entity that holds each account.

15. Letter-of-Credit Rights. Except as listed on **Schedule 15** attached hereto and made a part hereof, attached to the Prior Perfection Certificate as **Schedule 15** is a true and correct list of all Letters of Credit issued in favor of each Loan Party, as beneficiary thereunder, other than Letters of Credit which have a maximum available amount not exceeding \$250,000 in the aggregate for all Loan Parties.

16. No Change. The undersigned knows of no anticipated change in any of the circumstances or with respect to any of the matters contemplated in **Sections 1** through **15** of this Perfection Certificate Supplement except as set forth on **Schedule 16** hereto.

[The remainder of this page has been intentionally left blank]

IN WITNESS WHEREOF, we have hereunto signed this Perfection Certificate Supplement as of the date first written above.

[_____]

By: _____
Name: Title:

Schedules

Schedule 1(a)

Legal Names, Etc.

Legal Name	Type of Entity	Registered Organization (Yes/No)	Organizational Number ^a	Federal Employer Identification Number (or equivalent) ^a	Jurisdiction of Organization

^a If none, so state.

Schedule 1(b)

Prior Organizational Names

Loan Party	Prior Name	Date of Change

Schedule 1(c)

Changes in Identity; Other Names

Loan Party	Name of Entity	Action	Date of Action	State of Formation	List of All Other Names Used During Past Five Years

[Add Information required by Section 1 to the extent required by Section 1(c) of the Perfection Certificate Supplement]

Schedule 2(a)

Chief Executive Offices

Loan Party	Address	County	State	Country

Schedule 2(b)

Location of Books

Loan Party	Address	County	State	Country

Schedule 2(c)

Other Places of Business

Loan Party	Address	County	State	Country

Schedule 2(d)

Additional Locations of Equipment and Inventory

Loan Party	Address	County	State	Country

Schedule 2(e)

Locations of Collateral in Possession of Persons Other Than Any Loan Party

Loan Party	Name of Entity in Possession of Collateral/Capacity of such Entity	Address/Location of Collateral	County	State	Country

Schedule 4

Transactions Other Than in the Ordinary Course of Business

<u>Loan Party</u>	<u>Description of Transaction Including Parties Thereto</u>	<u>Date of Transaction</u>

Schedule 6 Copy of Collateral Filings To Be Filed

See attached.

Schedule 7

Filings/Filing Offices

<u>Type of Filing</u>	<u>Entity</u>	<u>Applicable Security Document [Mortgage, Security Agreement or Other]</u>	<u>Jurisdictions</u>

35 UCC-1 financing statement, fixture filing, mortgage, intellectual property filing or other necessary filing.

Schedule 8(a)
Real Property

Entity of Record	Location Address	Owned or Leased	Landlord/Owner if Leased	Description of Lease Documents

Schedule 8(b)

Leases, Subleases, Tenancies, Franchise agreements, Licenses or Other Occupancy Arrangements

Schedule 10

Equity Ownership and Other Equity Investments

1. Equity Ownership and other Equity Investments:

Loan Party	Issuer	Type of Organization	Record Owner (Beneficial Owner, if different)	Certificate No.	No. of Shares or Interests Owned	No. of Shares or Interests Outstanding	Percentage Ownership	No. Shares Covered by Warrants; Options

2. Organizational Structure Chart:

See attached.

Schedule 11(a) Instruments and Tangible Chattel Paper

1. Promissory Notes:

Entity	Principal Amount	Date of Issuance	Interest Rate	Maturity Date

2. Chattel Paper:

Schedule 11(b)

Advances

Intercompany Notes:

Noteholder	Obligor	Principal Amount	Date of Issuance	Maturity Date

Unpaid Intercompany transfers of goods:

Companies (Advanced to/Advanced by)	Amount of Advances

Schedule 12(a) Patents and Trademarks

UNITED STATES PATENTS:

Registrations:

	REGISTRATION	
OWNER	NUMBER	DESCRIPTION

Applications:

	APPLICATION	
OWNER	NUMBER	DESCRIPTION

Licenses:

				REGISTRATION/ APPLICATION
LICENSEE	LICENSOR	NUMBER	DESCRIPTION	

CANADIAN PATENTS:

Registrations:

	REGISTRATION	
OWNER	NUMBER	COUNTRY/STATE
		DESCRIPTION

Applications:

	APPLICATION	
OWNER	NUMBER	COUNTRY/STATE
		DESCRIPTION

	REGISTRATION/ APPLICATION	
COUNTRY/STATE	NUMBER	DESCRIPTION

[] PATENTS:

Registrations:

	REGISTRATION	
OWNER	NUMBER	COUNTRY/STATE
		DESCRIPTION

Applications:

APPLICATION			
OWNER	NUMBER	COUNTRY/STATE	DESCRIPTION

Licenses:

LICENSEE	LICENSOR	COUNTRY/STATE	REGISTRATION/ APPLICATION	
			NUMBER	DESCRIPTION

Registrations:

Applications:

NUMBER	TRADEMARK
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

Registrations:

Applications:

Licenses:

			REGISTRATION/ APPLICATION	
LICENSEE	LICENSOR	COUNTRY/STATE	NUMBER	TRADEMARK

[] TRADEMARKS:

Registrations:

REGISTRATION			
OWNER	NUMBER	COUNTRY/STATE	TRADEMARK

Applications:

APPLICATION			
OWNER	NUMBER	COUNTRY/STATE	TRADEMARK

REGISTRATION/ APPLICATION		
COUNTRY/STATE	NUMBER	TRADEMARK

Schedule 12(b)

Copyrights

UNITED STATES COPYRIGHTS

Registrations:

REGISTRATION NUMBER		
OWNER	TITLE	REGISTRATION NUMBER

Applications:

APPLICATION NUMBER	
OWNER	APPLICATION NUMBER

Licenses:

REGISTRATION/ APPLICATION			
LICENSEE	LICENSOR	NUMBER	DESCRIPTION

CANADIAN COPYRIGHTS

Registrations:

REGISTRATION NUMBER			
OWNER	COUNTRY/STATE	TITLE	REGISTRATION NUMBER

Applications:

APPLICATION NUMBER		
OWNER	COUNTRY/STATE	APPLICATION NUMBER

Licenses:

					REGISTRATION/
APPLICATION					
LICENSEE	LICENSOR	COUNTRY/STATE	NUMBER	DESCRIPTION	

[] **COPYRIGHTS**

Registrations:

OWNER	COUNTRY/STATE	TITLE	REGISTRATION NUMBER
-------	---------------	-------	---------------------

Applications:

OWNER	COUNTRY/STATE	APPLICATION NUMBER
-------	---------------	--------------------

Licenses:

					REGISTRATION/
APPLICATION					
LICENSEE	LICENSOR	COUNTRY/STATE	NUMBER	DESCRIPTION	

Schedule 12(c)

Intellectual Property Filings

Schedule 13 Commercial Tort Claims

Schedule 14

Deposit Accounts, Securities Accounts and Commodity Accounts

				BANK OR
OWNER	TYPE OF ACCOUNT	INTERMEDIARY	ACCOUNT NUMBERS	

LOCAL CASH ACCOUNTS

				BANK OR
OWNER	TYPE OF ACCOUNT	INTERMEDIARY	ACCOUNT NUMBERS	

Schedule 15 Letter of Credit Rights

Schedule 16

Changes from Circumstances Described in Perfection Certificate

EXHIBIT O

Form of
SOLVENCY CERTIFICATE

[Date]

The undersigned, the chief financial officer of each of the Loan Parties, hereby certifies on behalf of each Loan Party and for the benefit of the Secured Parties that:

1. This Certificate is provided pursuant to Section 4.01(e) of, and in connection with the consummation of the transactions contemplated by, the SECOND AMENDED AND RESTATED CREDIT AGREEMENT (as amended, restated, amended and restated, supplemented or modified from time to time, the “**Credit Agreement**”), dated as of October 6, 2014, among the DESIGNATED COMPANY (as defined in the Credit Agreement), as a borrower, NOVELIS INC., a corporation amalgamated under the Canada Business Corporations

Act (the “**Canadian Borrower**”), NOVELIS CORPORATION, a Texas corporation, and the other U.S. subsidiaries of the Designated Company signatory thereto as U.S. borrowers (each, an “**Initial U.S. Borrower**” and, collectively, the “**Initial U.S. Borrowers**”), NOVELIS UK LTD, a limited liability company incorporated under the laws of England and Wales with registered number 00279596 (“**Novelis UK**”), NOVELIS DEUTSCHLAND GMBH, a limited liability company organized under the laws of Germany, registered with the commercial register (*Handelsregister*) of the local court (*Amtsgericht*) of Göttingen with registration number HRB 772 (“**Novelis Deutschland**”), NOVELIS AG, a stock corporation (AG) organized under the laws of Switzerland (“**Novelis AG**”), and the other Borrowers from time to time party thereto, AV METALS INC., a corporation formed under the Canada Business Corporations Act, the Subsidiary

Guarantors, the Lenders, the Issuing Banks, WELLS FARGO BANK, NATIONAL ASSOCIATION, as U.S. swingline lender (in such capacity, “**U.S. Swingline Lender**”), WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent (in such capacity,

“**Administrative Agent**”) for the Secured Parties, WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent (in such capacity, “**Collateral Agent**”) for the Secured

Parties, and WELLS FARGO BANK, N.A. (LONDON BRANCH), as European swingline lender (in such capacity, “**European Swingline Lender**”) and the other parties party thereto. Capitalized terms used but not defined herein have the meaning given to such terms in the Credit Agreement.

2. At the time of and immediately after the consummation of the transactions to occur on [the Closing Date][the Amendment No. 2 Effective Date][the Aleris Acquisition Closing Date][Specified Incremental Commitment Availability Date], and at the time of and immediately following the making of each Loan and after giving effect to the application of the proceeds of each Loan made on such date and the operation of the Contribution, Intercompany, Contracting and Offset Agreement, (a) the fair value of the assets of each Loan Party (individually and on a consolidated basis with its Subsidiaries) will exceed its debts and liabilities, subordinated, contingent, prospective or otherwise; (b) the present fair saleable value of the property of each Loan Party (individually and on a consolidated basis with its Subsidiaries) will be greater than the amount that will be required to pay the probable liability of its debts and other liabilities, subordinated, contingent, prospective or

EXHIBIT O-1

otherwise, as such debts and other liabilities become absolute and matured; (c) each Loan Party (individually and on a consolidated basis with its Subsidiaries) will be able to pay its debts and liabilities, subordinated, contingent, prospective or otherwise, as such debts and liabilities become absolute and matured; (d) each Loan Party (individually and on a consolidated basis with its Subsidiaries) will not have unreasonably small capital with which to conduct its business in which it is engaged as such business is now conducted and is proposed to be conducted following [the Closing Date][the Amendment No. 2 Effective Date][the Aleris Acquisition Closing Date][Specified Incremental Commitment Availability Date]; and (e) each Loan Party is not “insolvent” as such term is defined under any bankruptcy, insolvency or similar laws of any jurisdiction in which any Loan Party is organized or incorporated (as applicable), or otherwise unable to pay its debts as they fall due.

[Signature Page Follows]

EXHIBIT O-2

IN WITNESS WHEREOF, the undersigned has executed this certificate on the date first written above.

NOVELIS INC., as Canadian Borrower,
Administrative Borrower and a Guarantor

By: _____
Name: _____
Title: _____

AV METALS INC., as Holdings

By: _____
Name: _____
Title: _____

NOVELIS CORPORATION, as a U.S. Borrower and a Guarantor

By: _____
Name: _____
Title: _____

NOVELIS GLOBAL EMPLOYMENT
ORGANIZATION, INC., as a U.S. Borrower and a Guarantor

By: _____
Name: _____
Title: _____

NOVELIS SOUTH AMERICA
HOLDINGS LLC, as a U.S. Borrower and a Guarantor

By: _____
Name: _____
Title: _____

EXHIBIT O-3

NOVELIS ACQUISITIONS LLC, as a U.S. Borrower and a Guarantor

By: _____
Name: _____
Title: _____

NOVELIS HOLDINGS INC.,
as a U.S. Borrower and a Guarantor

By: _____
Name: _____
Title: _____

NOVELIS UK LTD, as a U.K. Borrower and a Guarantor

By: _____ Name: _____ Title: _____

NOVELIS EUROPE HOLDINGS
LIMITED, as a U.K. Guarantor

By: _____ Name: _____ Title: _____

NOVELIS SERVICES LIMITED,
as a U.K. Guarantor

By: _____ Name: _____ Title: _____

NOVELIS AG, as Swiss Borrower,
European Administrative Borrower and a Guarantor

EXHIBIT O-4

By:_____ Name: _____ Title: _____

NOVELIS SWITZERLAND SA,
as a Swiss Guarantor

By:_____ Name: _____ Title: _____ 4260848 CANADA INC., as a Canadian Guarantor

By:_____ Name: _____ Title: _____

4260856 CANADA INC., as a Canadian Guarantor

By:_____ Name: _____ Title: _____

8018227 CANADA INC., as a Canadian Guarantor

By:_____ Name: _____ Title: _____

SIGNED AND DELIVERED AS A DEED
for and on behalf of NOVELIS
ALUMINIUM HOLDING UNLIMITED COMPANY
by its lawfully appointed attorney, as Irish Guarantor in the presence of:

By:_____ Name: _____ Title: _____

witness:

By:_____ Name: _____ Title: _____

EXHIBIT O-5

Address:

Occupation:

NOVELIS DEUTSCHLAND GMBH,
as German Borrower and a German Guarantor

By: _____ Name: _____ Title: _____

NOVELIS SHEET INGOT GMBH,
as a German Guarantor

By: _____ Name: _____ Title: _____

EXHIBIT O-6

NOVELIS DO BRASIL LTDA.,
as Brazilian Guarantor

By:_____ Name: _____ Title: _____

witness:

By:_____ Name: _____ Title: _____

witness:

By:_____ Name: _____ Title: _____

EXHIBIT O-7

NOVELIS PAE S.A.S., as French Guarantor

By: _____ Name: _____ Title: _____

EXHIBIT O-8

NOVELIS MEA LTD, a Company Limited by Shares under the Companies Law of the Dubai
International Financial Centre, as Dubai Guarantor

By:____ Name: ____ Title: ____

EXHIBIT O-9

Form of Intercompany Note

PROMISSORY NOTE

[\$Loan Amount] Date: [Date]

FOR VALUE RECEIVED, the undersigned [INTERCOMPANY BORROWER], a company organized under the laws of [Intercompany Jurisdiction] ("Borrower"), HEREBY PROMISES TO PAY to the order of [INTERCOMPANY LENDER], a [Type of Entity] organized under the laws of [Intercompany Lender Jurisdiction] ("Lender") on [Term Loan Maturity Date] (the "Maturity Date") and in accordance with the terms and conditions of the Subordination Agreements (as defined below) the principal sum of [] or, if less, the aggregate principal amount of the Advances (as defined below) made by Lender to the Borrower pursuant to *Section 1* below.

Capitalized terms used but not defined herein shall have the meanings ascribed to such terms in the Intercreditor Agreement, dated as of December 17, 2010 (as amended, supplemented, amended and restated or otherwise modified and in effect from time to time, the "Intercreditor Agreement") among NOVELIS INC., a corporation amalgamated under the Canada Business Corporations Act (the "Canadian Borrower"), the other Grantors from time to time party thereto, WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent for the Revolving Credit Lenders (as defined in the Intercreditor Agreement) (as successor to Bank of America, N.A. pursuant to that certain Intercreditor Joinder Agreement dated as of May 13, 2013), WELLS FARGO BANK, NATIONAL ASSOCIATION, as collateral agent for the Revolving Credit Claimholders (as defined in the Intercreditor Agreement) (as successor to Bank of America, N.A. pursuant to that certain Intercreditor Joinder Agreement dated as of May 13, 2013), STANDARD CHARTERED BANK, as administrative agent for the Pari Passu Secured Parties (as defined in the Intercreditor Agreement), (as successor to Bank of America, N.A. pursuant to that certain Intercreditor Joinder Agreement dated as of January 13, 2017), STANDARD CHARTERED BANK, as collateral agent for the Pari Passu Secured Parties (as defined in the Intercreditor Agreement) (as successor to Bank of America, N.A. pursuant to that certain Intercreditor Joinder Agreement dated as of January 13, 2017), and certain other persons which may be or become parties thereto or become bound thereto from time to time. Reference is hereby made to:

(i) the Second Amended and Restated Subordination Agreement, dated as of [], 2019 (as amended, supplemented, amended and restated or otherwise modified and in effect from time to time, the "Revolving Credit Subordination Agreement"), among Holdings, the subsidiaries of Holdings party thereto and WELLS FARGO BANK, NATIONAL ASSOCIATION, as administrative agent and as collateral agent under the Revolving Credit Agreement;

(ii) the Subordination Agreement, dated as of December 18, 2018 (as amended, supplemented, amended and restated or otherwise modified and in effect from time to time, the “Term Loan Subordination Agreement” and, together with the Revolving Credit Subordination Agreement, the “Subordination Agreements”), among Holdings, the subsidiaries of Holdings party thereto and STANDARD CHARTERED BANK, as administrative agent under the Term Loan Agreement;

(iii) the Amended and Restated Contribution, Intercompany, Contracting and Offset Agreement, dated as of May 13, 2013 (as amended, supplemented, amended and restated or otherwise modified and in effect from time to time, the “Revolving Credit CICO Agreement”), among Holdings, the subsidiaries of Holdings party thereto and WELLS FARGO BANK, NATIONAL ASSOCIATION, administrative agent and as collateral agent under the Revolving Credit Agreement; and

(iv) the Contribution, Intercompany, Contracting and Offset Agreement, dated as of December 18, 2018 (as amended, supplemented, amended and restated or otherwise modified and in effect from time to time, the “Term Loan CICO Agreement” and, together with the Revolving Credit CICO Agreement, the “CICO Agreements”), among Holdings, the subsidiaries of Holdings party thereto, STANDARD CHARTERED BANK, as administrative agent and as collateral agent under the Term Loan Agreement.

Loan. The principal amount stated above (the “Advances”) has been loaned to the Borrower by the Lender subject to the terms and conditions hereof and of the Subordination Agreements, the CICO Agreements, the Intercreditor Agreement, the Revolving Credit Agreement and the Term Loan Agreement. Subject to the terms and conditions hereof and of the Subordination Agreements, the CICO Agreements, the Intercreditor Agreement, the Revolving Credit Agreement and the Term Loan Agreement, the Borrower may prepay the Advances under this Promissory Note without premium or penalty.

13. **Interest.** (a) The Advances shall bear interest at a rate per annum equal to []% (computed on the basis of year of [360][365] days), payable until the Maturity Date. The Borrower promises to pay interest on the unpaid principal amount of Advances from the date hereof until such principal amount is paid in full. Interest accrued on the amount of all other obligations hereunder shall be payable on demand from and after the time such obligation becomes due and payable (whether by acceleration or otherwise). [Interest on the amount of all obligations hereunder shall continue to accrue after the beginning of any bankruptcy or insolvency proceeding involving the Borrower, whether or not allowed in such proceeding.] [In the event that accrued interest is not paid cash, it will compound on an annual basis in accordance with article 1343-2 of the French Civil Code.]

[(b) To comply with the provisions of article L. 313-4 of the French Monetary and Financial Code (*Code Monétaire et Financier*), the Borrower and the Lender agree that the effective global rate for the facility is []% per annum and []% per quarter.]

[(b) Notwithstanding any other provision of this Promissory Note, it is understood that the interest rate applicable hereunder in no event shall exceed the maximum interest rate permitted by Law no. 108 of March 7, 1996 (*disposizioni in materia di usura*) and related implementation regulations and subsequent amendments and/or repeals. Should, by any means, the

interest rate due pursuant to the *Section 2* above exceed the maximum rate permitted under applicable law, the interest rate applicable shall be automatically reduced as necessary to allow the interest rate applicable to be in compliance with any applicable law.]

[(b) Notwithstanding any other provisions of this Promissory Note, in no such event shall, if applicable, any: (i) an increase of the applicable interest rate triggered by the late payment of an overdue amount exceed 0.5% per annum on the outstanding principal amount due (*article 1907 Belgian Civil Code*); (ii) prepayment and related fees exceed six months of interest on the pre-paid amount, calculated at the rate of interest accruing on the principal amount (*1907 bis Belgian Civil Code*); (iii) interest be claimed on overdue interest, unless (A) the overdue interest has accrued over a period of at least one year, and (B) the interest has formally been claimed by the Lender, or the Borrower has agreed to it, after such period has effectively passed (*article 1154 Belgian Civil Code*); and (iv) the aggregate annual interest rate applicable in this Promissory Note exceed the maximum permitted by the *Belgian Civil Code* and other Requirements of Law from time to time in force in Belgium.]

[(b) *[Interest Act (Canada)*. For purposes of the *Interest Act (Canada)*, whenever in this Promissory Note any interest is calculated on the basis of a period of time other than a year of 365 or 366 days, as applicable, the annual rate of interest to which each rate of interest utilized pursuant to such calculation is equivalent is such rate so utilized multiplied by the actual number of days in the calendar year in which the same is to be ascertained and divided by the number of days used in such calculation. For the purposes of the *Interest Act (Canada)*, the principle of deemed reinvestment of interest will not apply to any interest calculation under this Promissory Note, and the rates of interest stipulated in this Promissory Note are intended to be nominal rates and not effective rates or yields.

(c) *Criminal Interest Rate*. (i) If any provision of this Promissory Note would obligate the Borrower to make any payment of interest or other amount payable to the Lender hereunder in an amount or calculated at a rate which would be prohibited by law or would result in a receipt by the Lender of interest at a criminal rate (as construed under the *Criminal Code (Canada)*), then notwithstanding that provision, that amount or rate shall be deemed to have been adjusted with retroactive effect to the maximum amount or rate of interest, as the case may be, as would not be so prohibited by law or result in a receipt by the Lender of interest at a criminal rate, the adjustment to be effected, to the extent necessary, (A) *first*, by reducing the amount or rate of interest required to be paid to the Lender under this *Section 2* and (B) thereafter, by reducing any fees, commissions, premiums and other amounts required to be paid to the Lender which would constitute interest for purposes of *Section 347* of the *Criminal Code (Canada)*.

(ii) Notwithstanding clause (c)(i), and after giving effect to all adjustments contemplated thereby, if the Lender shall have received an amount in excess of the maximum permitted by the *Criminal Code (Canada)*, then the Borrower, shall be entitled, by notice in writing to the Lender, to obtain reimbursement from the Lender in an amount equal to the excess, and pending reimbursement, the amount of the excess shall be deemed to be an amount payable by the Lender to the Borrower.

(iii) Any amount or rate of interest referred to in this *Section 2* shall be determined in accordance with generally accepted actuarial practices and principles as an effective annual rate of interest over the term of this Promissory Note on the assumption that any charges, fees or expenses that fall within the meaning of interest (as defined in the

Criminal Code (Canada)) shall be pro-rated over that period of time and, in the event of a dispute, a certificate of a Fellow of the Canadian Institute of Actuaries appointed by the Authorized Pari Passu Collateral Agent (or following the Discharge of Pari Passu Secured Obligations, the Revolving Credit Administrative Agent) shall be conclusive for the purposes of that determination.]

Payments; Record of Debt. Both principal and interest are payable in the currency in which Advances are made to Lender in same day funds. The Advances made by Lender to the Borrower pursuant to the terms hereof, and all payments made on account of principal thereof, shall be recorded by Lender[, acting for this purpose solely as an agent of the Borrower,] in its books and records, such books and records constituting prima facie evidence of the accuracy of the information contained therein; *provided* that the failure of Lender to make any such recordation or endorsement shall not affect the obligations of the Borrower hereunder.

14. **Waivers.** The Borrower hereby waives presentment, demand, protest and notice of any kind. No failure to exercise, and no delay in exercising, any rights hereunder on the part of the holder hereof shall operate as a waiver of such rights.

Event of Default. In the event (each, an “Event of Default”) that:

- (a) a Revolving Credit Default shall have occurred and is continuing, and/or
- (b) a Pari Passu Default shall have occurred and is continuing, and/or
- (c) the Borrower shall fail to pay any principal of any Advance or interest

thereon pursuant to this Promissory Note when the same becomes due and payable,

then, and in any such event, the Lender may, by notice to the Borrower, declare the Advances, all interest thereon and all other amounts payable under this Promissory Note to be forthwith due and payable, whereupon the Advances, all such interest and all such amounts shall become and be forthwith due and payable, without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived by the Borrower; *provided* that in the case of the occurrence of (i) a Revolving Credit Default of the type referred to in *Section 8.01(g)* or *(h)* of the Revolving Credit Agreement in effect on the date hereof, or any similar provisions of any other

Revolving Credit Agreement, (ii) a Pari Passu Default of the type referred to in *Section 8.01(g)* or *(h)* of the Term Loan Agreement in effect on the date hereof, or any similar provisions of any other Pari Passu Loan Document or (iii) an Event of Default under *clause (c)* above [or in the case that any financial statements of the Borrower show the book value of the net assets of the Borrower have fallen to below half of its stated share capital (*Stammkapital*)], the Advances, and all such interest and all other amounts owing hereunder shall automatically become and be due and payable, without presentment, demand, protest or any notice of any kind, all of which are hereby expressly waived by the Borrower. [The Borrower represents and warrants that it has obtained shareholder approval by resolution authorizing the Borrower to permit the Lender to terminate this Promissory Note and to claim immediate repayment of all sums due hereunder in case of a change of control as contemplated by the Revolving Credit Agreement and/or the Pari Passu Loan Documents and that such resolution will be timely filed with the Clerk’s Office of the competent Commercial Court (*article 556 Belgian Companies Code*).]

Governing Law. This Promissory Note shall be governed by, and construed in

accordance with, the laws of [Intercompany Borrower Jurisdiction], without giving effect to principles of conflict of laws thereof.

Amendments. This Promissory Note cannot be amended without the consent of each of (i) the parties hereto and (ii) prior to the Discharge of Revolving Credit Secured Obligations, the Revolving Credit Administrative Agent and (iii) prior to the Discharge of Pari Passu Secured Obligations, the Authorized Pari Passu Collateral Agent.

Expenses. The Borrower agrees to pay all costs and expenses, including reasonable attorneys' fees and legal expenses, incurred by the Lender in endeavoring to collect any amounts payable hereunder which are not paid when due, whether by acceleration or otherwise.

No Set Off. Unless required by applicable law, and subject to the terms of the Subordination Agreements, at no time may the Lender appropriate and apply toward the payment of all or any part of the obligations of the Borrower under this Promissory Note (i) any other indebtedness due or to become due from the Borrower to the Lender, and (ii) any moneys, credits or other property belonging to the Borrower, at any time held by or coming into the possession of the Lender.

Taxes. (a) In the event that a Revolving Credit Default and/or a Pari Passu Default has occurred and is continuing, any and all payments by the Borrower under this Promissory Note shall be made free and clear of and without deduction for any and all present or future taxes, levies, duties, imposts, deductions, charges or withholdings, and all liabilities with respect thereto, excluding (i) in the case of the Lender taxes measured by its net income and franchise taxes imposed on it, and similar taxes imposed by the jurisdiction (or any political subdivision thereof) under the laws of which the Lender is organized, and (ii) in the case of the Lender, except to the extent arising solely as a result of entering into this Promissory Note, taxes measured by its net income and franchise taxes imposed on it as a result of a present or former connection between the Lender and the jurisdiction of the governmental authority imposing such tax or any taxing authority thereof or therein, other than the entering into of the Promissory Note (all such non-excluded taxes, levies, duties, imposts, deductions, charges, withholdings and liabilities being hereinafter referred to as "Taxes"). If any Taxes shall be required by law to be withheld or deducted from or in respect of any sum payable hereunder to the Lender (w) the sum payable shall be increased as may be necessary so that after making all required deductions or withholdings in respect of Taxes (including deductions applicable to additional sums payable under this *Section 10*) the Lender receives an amount equal to the sum it would have received had no such deductions or withholdings been made, (x) the Borrower shall make such deductions or withholdings, (y) the Borrower shall pay the full amount deducted or withheld to the relevant taxing authority or other authority in accordance with applicable law and (z) the Borrower shall deliver to the Lender evidence of such payment.

(b) In addition, if a Revolving Credit Default and/or a Pari Passu Default has occurred and is continuing, the Borrower shall pay any present or future stamp, registration, notarization or documentary or similar taxes or any other excise or property taxes, charges or similar levies, and all liabilities with respect thereto, in each case arising from any payment made or credited under or in connection with this Promissory Note or from the execution, delivery, registration or enforcement of, or otherwise with respect to, this Promissory Note (collectively, "Other Taxes").

(c) The Borrower shall indemnify the Lender for the full amount of Taxes and Other Taxes (including any Taxes and Other Taxes imposed by any jurisdiction on amounts

payable under this *Section 10*) paid by the Lender and any liability (including for penalties, interest and expenses) that arises from any payment made or crediting of amounts hereunder or from the execution, delivery, performance or enforcement of, or otherwise with respect to, this Promissory Note, whether or not such Taxes or Other Taxes were correctly or legally asserted. This indemnification shall be made within 30 days from the date the Lender makes written demand therefor.

(d) Within 30 days after the date of any payment of Taxes or Other Taxes by the Borrower, the Borrower shall furnish the Lender, pursuant to the indemnity set forth in *clause (c)* above, the original or a certified copy of a receipt evidencing payment thereof or other evidence of payment thereof reasonably acceptable to Lender.

(e) The Borrower and the Lender will use reasonable good faith efforts to eliminate or reduce any Taxes or Other Taxes to which a payment hereunder may be subject and will provide any certificates or other evidence of an exemption from or reduced rate of Taxes or Other Taxes in this regard.

(f) Without prejudice to the survival of any other agreement of the Borrower, the Lender hereunder, the agreements and obligations of the Borrower contained in this *Section 10* shall survive the payment in full of all other obligations of the Borrower under this Promissory Note.

(g) If the Lender determines in its sole discretion exercised reasonably that it has received or has been granted a credit against, or remission for, or a refund or a repayment of any Taxes (i) as a result of the Borrower's deduction or withholding and payment to a taxing authority of an amount pursuant to clause (a) above or (ii) with respect to which the Borrower has paid an amount to the Lender or any of its transferees or assignees, as the case may be, pursuant to clause (c) above, then the Lender, as the case may be, shall, within 30 days, pay the Borrower the lesser of (y) the credit, remission, refund or repayment of Taxes received or granted and (z) the amount paid by the Borrower pursuant to this *Section 10*.

Judgment Currency: (a) This is an international loan transaction in which the specification of [**Currency**] is of the essence, and [**Currency**] shall in each instance be the currency of account and payment in all instances.

(h) Borrower's obligations hereunder to make payments in [**Currency**] shall not be discharged or satisfied by any tender or recovery pursuant to any judgment expressed in or converted into any currency other than [**Currency**] or in another place, except to the extent that such tender or recovery results in the effective receipt by the Lender of the full amount of [**Currency**] expressed to be payable to the Lender under this Promissory Note.

(i) If, for the purpose of obtaining or enforcing judgment against Lender in any court or in any jurisdiction, it becomes necessary to convert into or from any currency other than [**Currency**] (such other currency being hereinafter referred to as the "*Other Currency*") an amount due in [**Currency**], the conversion shall be made at the spot selling rate at which the Authorized Pari Passu Collateral Agent (or following the Discharge of Pari Passu Secured Obligations, the Revolving Credit Administrative Agent) (or if the Authorized

Pari Passu Collateral Agent (or, following the Discharge of Pari Passu Secured Obligations, the Revolving Credit Administrative Agent) does not quote a rate of exchange on such currency, by a known dealer in such currency designated by the Authorized Pari Passu Collateral Agent (or, following the Discharge of Pari Passu Secured Obligations, the Revolving Credit Administrative Agent)) offers to sell such Other Currency for [Currency] in the London foreign exchange market at approximately 11:00 a.m. London time on such date for delivery two (2) Business Days later (such date of determination of such spot selling rate, being hereinafter referred to as the "Other Currency Conversion Date").

(j) If there is a change in the rate of exchange prevailing between the Other Currency Conversion Date and the date of actual payment of the amount due, the Borrower covenants and agrees to pay, or cause to be paid, as a separate obligation and notwithstanding any such judgment or judicial award, such additional amounts, if any (but in any event not a lesser amount) as may be necessary to ensure that the amount paid in the Other Currency, when converted at the rate of exchange prevailing on the date of payment, will produce the amount of [Currency] which could have been purchased with the amount of Other Currency stipulated in the judgment or judicial award at the rate of exchange prevailing on the Other Currency Conversion Date.

Submission to Jurisdiction; Service of Process. (a) Any legal action or proceeding with respect to this Promissory Note, and any other Revolving Credit Loan Document or Pari Passu Loan Document to which the Borrower is a party, may be brought in the courts of the State of New York or of the United States of America for the Southern District of New York, and, by execution and delivery of this Promissory Note, the Borrower (in consideration of similar submissions made by the Lender in the Revolving Credit Loan Documents and the Pari Passu Loan Documents) hereby accepts for itself and in respect of its property, generally and unconditionally, the jurisdiction of the aforesaid courts. The parties hereto hereby irrevocably waive any objection, including any objection to the laying of venue or based on the grounds of *forum non conveniens*, that any of them may now or hereafter have to the bringing of any such action or proceeding in such respective jurisdictions.

(k) The Borrower hereby irrevocably designates, appoints and empowers CSC Corporation, 1180 Ave of the Americas, Suite 210, New York, New York, 10036 (telephone no: 212-299-5600) (facsimile no: 212-299-5656) (electronic mail address: mwiener@cscinfo.com) (the "Process Agent"), in the case of any suit, action or proceeding brought in the United States of America as its designee, appointee and agent to receive, accept and acknowledge for and on its behalf, and in respect of its property, service of any and all legal process, summons, notices and documents that may be served in any action or proceeding arising out of or in connection with, this Promissory Note. Such service may be made by mailing (by registered or certified mail, postage prepaid) or delivering a copy of such process to the Borrower in care of the Process Agent at the Process Agent's above address, and the Borrower hereby irrevocably authorizes and directs the Process Agent to accept such service on its behalf. As an alternative method of service, the Borrower irrevocably consents to the service of any and all process in any such action or proceeding by the mailing (by registered or certified mail, postage prepaid) of copies of such process to the Process Agent or the Borrower care of the Canadian

Borrower at the Canadian Borrower's address specified in *Section 11.01* of the Term Loan Agreement or at such other address as the Canadian Borrower may specify pursuant to such *Section 11.01*. Alternatively, the Borrower hereto irrevocably consents to service of process in the manner provided for notices (other than telecopier, e-mail or other electronic

communication) in *Section 11.01* of the Revolving Credit Agreement. The Borrower agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law.

- (l) Nothing contained in this *Section 12* shall affect the right of the Lender thereof to serve process in any other manner permitted by law or commence legal proceedings or otherwise proceed against the Borrower in any other jurisdiction.

Pledge of Note. Pursuant to the Pari Passu Security Documents, the Lender has pledged and granted a security interest in all of its rights and remedies under and in respect of this Promissory Note in favor of the Pari Passu Collateral (for the benefit of the Pari Passu Secured Parties) and pursuant to the Revolving Credit Security Documents, the Lender has pledged and granted a security interest in all of its rights and remedies under and in respect of this Promissory Note in favor of the Revolving Credit Collateral Agent (for the benefit of the Revolving Credit

Claimholders) and pursuant to the Intercreditor Agreement the Authorized Pari Passu Collateral Agent has agreed to act as sub-agent and as bailee for the Revolving Credit Agents and the Subordinated Lien Secured Parties, and the Borrower hereby (i) acknowledges and consents to each such pledge and security interest, (ii) agrees that upon the occurrence and during the continuance of any Pari Passu Default the Authorized Pari Passu Collateral Agent may exercise any remedies provided for by the Pari Passu Security Documents in accordance with the terms thereof or any other remedies provided by applicable law, and upon the occurrence and during the continuance of any Revolving Credit Default the Revolving Credit Collateral Agent may exercise any remedies provided for by the Revolving Credit Security Documents in accordance with the terms thereof or any other remedies provided by applicable law, in each case, in accordance with the terms of the Intercreditor Agreement, (iii) agrees that this Promissory Note may not be assigned by the Borrower without the prior written consent of the Authorized Pari Passu Collateral Agent and the Revolving Credit Collateral Agent (each of which is expressly made a third party beneficiary hereof) and (iv) agrees and acknowledges that subject to the terms of the Intercreditor Agreement, this Promissory Note may be assigned or otherwise transferred by the Authorized Pari Passu Collateral Agent in accordance with the terms of the Pari Passu Security Documents or by the Revolving Credit Collateral Agent in accordance with the terms of the Revolving Credit Security Documents.

WAIVER OF JURY TRIAL. EACH OF THE BORROWER AND THE LENDER IRREVOCABLY WAIVES TRIAL BY JURY IN ANY ACTION OR PROCEEDING WITH RESPECT TO THIS PROMISSORY NOTE AND ANY OTHER LOAN DOCUMENT.

Notices. Any notice or other communication herein required or permitted shall be given to the Borrower or the Lender care of the Canadian Borrower as set forth in *Section 11.01* of the Revolving Credit Agreement, and to each Pari Passu Representative as set forth on such Pari Passu Representative's signature page to the Intercreditor Agreement.

Severability. Wherever possible, each provision of this Promissory Note shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Promissory Note shall be prohibited by or invalid by any applicable legally binding requirements of any governmental authority (including, without limitation, any applicable laws, judgments, orders, decrees, ordinances, rules, regulations, statutes or case law), such provision shall be ineffective to

the extent of such prohibition or invalidity without invalidating (a) the remainder of such provision or (b) the remaining provisions of this Promissory Note.

Conflicts. In the event of a direct conflict between the terms and provisions contained in this Promissory Note and the terms and provisions contained in the Subordination Agreements, it is the intention of the parties hereto that such terms and provisions in such documents shall be read together and construed, to the fullest extent possible, to be in concert with each other. In the event of any actual, irreconcilable conflict that cannot be resolved as aforesaid, the terms and provisions of the Subordination Agreements shall control and govern.

[SIGNATURE PAGE FOLLOWS]

Borrower:

[Intercompany Borrower]

By:___

Name:
Title:

ACKNOWLEDGED AND AGREED TO
AS OF THIS DAY OF , 20_:

[Intercompany Lender]

By:_____ Name:
Title:

Schedule 1.01(a)**Agent's Account****Payment Instructions:****USD (US Borrowers)**

Bank:	Wells Fargo Bank, N.A.
Bank Address:	420 Montgomery Street, San Francisco, CA
ABA Number:	121-000-248
Account Number:	[Bank Account Information Omitted]
Credit To:	Wells Fargo Bank, N.A.
Regarding:	Novelis

USD (Canadian Borrowers)

Bank:	TD Canada Trust
Bank Address:	55 King Street West, Toronto, Ontario, Canada M5K 1A2
Transit Number:	10202
Bank Number:	4
Canadian Clearing Code:	410202
SWIFT Number	TDOMCATTTOR
Beneficiary:	Wells Fargo Capital Finance Corporation Canada
Beneficiary Account Number:	[Bank Account Information Omitted]
	40 King Street West Suite 2500, Toronto, ON M5H 3Y2
Beneficiary Address:	Canada
Ordering Customer:	Novelis

GBP (UK, Swiss, German, Belgian, US and Canadian Borrowers)

Bank Name	Wells Fargo Bank, N.A. London
Swift	PNBPGB2L
Account Name	Wells Fargo Bank, N.A.
IBAN	[Bank Account Information Omitted]
Sort Code	16-56-71
Account No:	[Bank Account Information Omitted]
Reference	Novelis

EUROS (UK, Swiss, German, Belgian, US and Canadian Borrowers)

Bank Name	Wells Fargo Bank, N.A. London
Swift	PNBPGB2L
Account Name	Wells Fargo Bank, N.A.
IBAN	[Bank Account Information Omitted]
Account No:	[Bank Account Information Omitted]
Reference	Novelis

CHF (UK, Swiss, Belgian and German Borrowers)

Bank Name	Wells Fargo Bank, N.A. London
Swift	PNBPGB2L
Account Name	16-56-71
IBAN	Wells Fargo Bank, N.A.
Sort Code	[Bank Account Information Omitted]
Account No:	[Bank Account Information Omitted]
Reference	Novelis

USD (UK, Swiss, Belgian and German Borrowers)

Bank Name Wells Fargo Bank, N.A. London

Swift	PNBPGB2L
Account Name	Wells Fargo Bank, N.A.
IBAN	[Bank Account Information Omitted]
Account No:	[Bank Account Information Omitted]
Reference	Novelis

Schedule 1.01(b)
Subsidiary Guarantors

CanadaNovelis Inc.

§

§ 4260848 Canada Inc.

§ 4260856 Canada Inc.

§ 8018227 Canada Inc.

United States

§ Novelis Corporation

§ Novelis Acquisitions LLC

§ Novelis Holdings Inc.

§ Novelis Global Employment Organization, Inc.

§ Novelis South America Holdings LLC

United Kingdom

§ Novelis Europe Holdings Limited

§ Novelis Services Limited

§ Novelis UK Ltd

Switzerland

§ Novelis AG

§ Novelis Switzerland SA

Ireland

§ Novelis Aluminium Holding Unlimited Company

Germany

§ Novelis Sheet Ingot GmbH

§ Novelis Deutschland GmbH

Brazil

§ Novelis do Brasil Ltda.

France

§ Novelis PAE S.A.S.

Dubai

§ Novelis MEA Ltd

Schedule 1.01(c)

Applicable Jurisdiction Requirements

- 1.No later than 30 days (or such longer period as to which the Administrative Agent may agree) following the date that the Administrative Agent gives notice to the Administrative Borrower requiring compliance with the requirements set forth in Articles 1321 *et seq* of the French Civil Code in respect of Accounts governed by the laws of France or owed by Account Debtors located in France, the Administrative Agent shall (a) be satisfied that the applicable Borrowers and Borrowing Base Guarantors shall have complied with such requirements or (b) have received an opinion (from a firm satisfactory to the Administrative Agent in form and substance satisfactory to the Administrative Agent addressing such matters as the Administrative Agent may reasonably request) that includes a conclusion to the effect that the Accounts have been duly assigned and are beyond the reach of any assignor's creditors due to compliance with such notice requirements of the French Civil Code.
- 2.To the extent requested by the Administrative Agent or the Collateral Agent, notification to and, if required, consent from such Account Debtors located in such jurisdictions or whose Accounts are governed by the law of such jurisdictions, as may be requested from time to time.

Schedule 1.01(d)

Specified Account Debtors

Company
Anheuser-Busch InBev
Airbus
Boeing
General Motors
Rexam
Ball Corp.
Jaguar Land Rover / Tata Motors
BMW
Volkswagen / Audi
Ford

Schedule 1.01(e)

Excluded Collateral Subsidiaries

France

- Novelis Laminés France S.A.S.

Germany

- Novelis Aluminum Beteiligungs GmbH

India

- Novelis (India) Infotech Ltd.

Mexico

- Novelis de Mexico, S.A. de C.V.

Italy

- Novelis Italia S.p.A.

Schedule 1.01(f)

Excluded Subsidiaries

Ireland

Novelis Aluminum Holding Unlimited Company

Brazil

Novelis do Brasil Ltda.

Brecha Energética Ltda.

France

Novelis Laminés France S.A.S.

India

Novelis (India) Infotech Ltd.

Mexico

Novelis de Mexico, S.A. de C.V.

Italy

Novelis Italia S.p.A.

Korea

Novelis Korea Limited

China

Novelis (Shanghai) Aluminum Trading Company

Novelis (China) Aluminum Products Co. Ltd.

Dubai

Novelis MEA Ltd

Vietnam

Novelis Vietnam Company Limited

Schedule 1.01(g)**Joint Venture Subsidiaries**

None.

Schedule 1.01(h)**Unrestricted Subsidiaries**

- Novelis Services (Europe) Inc.
- Novelis Services (North America) Inc.

Schedule 2.18**Existing Letters of Credit**

<u>Issuing Bank</u>	<u>Beneficiary</u>	<u>L/C Number</u>	<u>Face Amount</u>	<u>Expiration Date</u>
HSBC	Lebensversicheru ngs-AG	SDCMTN569029	46,000 EUR	11/18/2019 Auto-Extension Letter of Credit
HSBC	Commerzbank	SDCMTN570603	1,700,000 EUR	09/06/2019 Auto-Extension Letter of Credit
HSBC	HSBC Trinkhaus	SDCMTN572847	836,100 EUR	3/27/2019
Deutsche Bank	Novelis AG	DBS-22327	25,500 EUR	11/3/2019
Bank of America	Henan Zhongfu Industrial China	6008GT010048/18	56,800 EUR	7/31/2019
Bank of America	Yunnan Yongshun	GT01037018	114,400 EUR	10/31/2019
Deutsche Bank	SWA China	DBS-22315	1,467,300 EUR	9/15/2019

Deutsche Bank	DB Paris	DBS-22341	16,121 EUR	8/30/2019
Bank of America	Liberty Mutual	68047318	3,136,200 USD	01/19/2020
Bank of America	Town of Scriba	68059319	30,500 USD	5/24/19
Bank of America	Independent Electricity System Operator	68056374 aka 7114SB105672/11	605,000 CAD	2/01/2020
Deutsche Bank	DB Paris	DBS-22355	695,000 EUR	3/01/2020

Schedule 2.21

Lenders to Swiss Borrower

SWISS QUALIFYING BANKS	SWISS NON-QUALIFYING BANKS
Bank of America, N.A.	ABN AMRO Capital USA
Barclays Bank PLC	ING Capital LLC
Bank of Montreal	
BNP Paribas	
Citibank, N.A.	
Credit Suisse AG, Cayman Islands Branch	
Deutsche Bank AG New York Branch	
HSBC Bank USA, N.A.	
JPMorgan Chase Bank, N.A.	
Morgan Stanley Bank, N.A.	
PNC Bank, National Association	
Regions Bank	
Standard Chartered Bank	
Wells Fargo Bank N.A., London Branch	
Wells Fargo Bank, National Association	
Societe Generale, New York Branch	

Schedule 3.06(c)

Violations or Proceedings

None.

Schedule 3.17

Pension Matters

None.

Schedule 3.21 Material Documents

- Each material Senior Note Document:
 - o Indenture, dated as of August 29, 2016, by and among Novelis Corporation, the guarantors from time to time party thereto, and Regions Bank, as trustee, relating to the 6.25% Senior Notes due 2024
 - o Indenture, dated as of September 14, 2016, by and among Novelis Corporation, the guarantors from time to time party thereto, and Regions Bank, as trustee, relating to the 5.875% Senior Notes due 2026
- Each material Secured Term Loan Document o Credit Agreement, dated as of January 10, 2017, among the Loan Parties party thereto, the lenders party thereto, Standard Chartered Bank, as administrative agent and as collateral agent, as amended as of September 14, 2017 and as of November 20, 2018 (the “Secured Term Loan Credit Agreement”) o All exhibits and schedules to the Secured Term Loan Credit Agreement
- Each material Permitted Short Term Loan Document o Short Term Credit Agreement, dated as of December 18, 2018, among the Loan Parties party thereto, Standard Chartered Bank, as administrative agent, and the lenders party thereto.
 - o All exhibits and schedules to the Short Term Credit Agreement.

Section 3.24

Location of Material Inventory and Equipment

I. Novelis do Brasil Ltda- locations of Inventory and Equipment

Address
12.551 – 14th Floor, Torre Empresarial World Trade Center de São Paulo, São Paulo, SP- 04578-000, Brazil
Pindamonhangaba: Av. Buriti, 1087 – Feital Pindamonhangaba, SP CEP 12441-270 Brazil
Santo André: R. Felipe Camarão, 414 – Utinga Santo André, SP CEP 09220-902 Brazil
Ouro Preto: Av. Américo R. Gianetti, 521 - Saramenha Ouro Preto, MG CEP 35400-000 Brazil
Hydropower Plant - Brecha: Fazenda Usina da Brecha, S/Nº - Piranga, Guaraciaba, MG CEP 35436-000 Brazil
Centro de Coletas – Sertãozinho Avenida: Marginal José Osvaldo Marques, nº2100, Gleba B1, Sítio Nossa Senhora de Fátima – Setor industrial. Sertãozinho – SP CEP 14173-010
Centro de Coletas – São Paulo R. Marcelo Müller, nº 825, Jardim Independência São Paulo – SP CEP 03223 - 060
Centro de Coletas – Salvador Av. Dom Genaro de Carvalho, nº 243 – Dom Avelar Salvador – BA CEP 41315 – 290
Centro de Coletas – Recife R. Ana Barreto, nº 250 – Jardim Jordão Jaboatão dos Guararapes – PE CEP 54315-050
Address
Centro de Coletas – Juiz de Fora R. Galileu Picorelli, nº 216 – Bairro Benfica Juiz de Fora – MG CEP 36092-010
Centro de Coletas – Campinas R. Pedro Stancato, nº 841 – Bairro Jardim dos Amarais Campinas – SP CEP 13082-050
Centro de Coletas – Ananindeua R. Parabor, nº 240, Guanabara Ananindeua – PA CEP 67010-520
Centro de Coletas – Uberlândia Avenida Rebouças, n.º 66, Galpão 02, Nossa Senhora das Graças Uberlândia – MG CEP 38402-002
Centro de Coletas – Pindamonhangaba Av Independência (Ipiranga), 1057, Lote 4, Quadra C, Cidade Nova Pindamonhangaba, SP, CEP 12.414-240.
Centro de Distribuição – Vitória

Rodovia Governador Mario Covas, Km 281,3, nº 1941, complemento 2873 e 3013, sala 117
Cariacica/ES
CEP 29157-100.

Novelis do Brasil Ltda- third party locations of Inventory and Equipment

Local	Address
Metalur Brasil Indústria e Comércio de Metais Ltda.	Estrada da Ronda, 100 – Ronda Araçariguama – SP CEP: 184770-000 Brazil

Address
Inventory and equipment stored with customers under consignment arrangements: 1. Crown Colombiana S.A. Vereda Tibitó Via Autódromo Tocancipá a Zipaquirá, Tocancipá – c/marca Colombina Inventory and equipment stored with third party, for industrialization purposes: 1. Tekno S.A. Constrs. Industria e Comercio Rod. Washington Luiz, Km 181 Guaratinguetá – SP CEP 12500-000 Brazil 2. Aluzinco Ind. Com. De Metais Ltda Estrada Imperial, 1500- Distrito Industrial Aracariguama – SP CEP 18147-000 Brazil Inventory stored with third party, for equipment purposes: 1. Elfer Indústria Serviço e Comércio Ltda. Av. Gastão Vidigal Neto, nº 230 Pindamonhangaba, SP Brazil Inventory stored with third party – Bonded Warehouse: Cragea Cia. Reg. De Armaz. Gerais e Entr. Aduaneiros Estrada Velha Rio/SP s/n km 103 Eugenio de Melo São José dos Campos – SP CEP 12247-970 Brazil Inventory stored with third party – warehouse: Gelog Locações e Transportes Ltda. Av: Buriti, nº100 Pindamonhangaba – SP Brazil

II. Novelis Inc.

Two Alliance Center
3560 Lenox Road, Suite 2000
Atlanta, GA 30326
USA

1 Lappan's Lane, P.O. Box 2000 Kingston, Ontario K7L 4Z5

2040 rue Fay, P.O. Box 1001
Jonquiere, Quebec G

Third Party Inventory and Equipment Locations

Address
Ryerson Canada 161 The West Mall Etobicoke, Ontario M9C 4V8

<p>ADS Logistics 929 Brock Road Pickering, ON L1W 2X9</p> <p>Cole Carriers Corp. 1632 Burlington St. East HAMILTON, Ontario Canada L8H 3L3</p> <p>CGI Inc. 3200 Dickson MONTREAL, Québec H1N 2K1</p> <p>CGI Inc. 1 Complexe Desjardins MONTREAL, Quebec H5B 1C3</p> <p>Ryerson Canada, Inc. 7525 Financial Drive BRAMPTON, Ontario L6Y 5P4 Canada</p> <p>Samuel, Son & Co., Limited 546 Elgin Street BRANTFORD, ONTARIO N3S 7P8 Canada</p> <p>STC Steel Technologies Canada Ltd. 16 Cherry Blossom Road CAMBRIDGE, Ontario N3H4R7</p>

III. German Loan Parties

Loan Party	Address
Novelis Sheet Ingot GmbH	Hannoversche Strasse 1, 37075 Göttingen, Germany
Novelis Deutschland GmbH	Hannoversche Strasse 1, 37075 Göttingen, Germany

Loan Party	Address
Novelis Deutschland GmbH	<p>Registered Office: Hannoversche Strasse 1 Göttingen Lower Saxony Germany D-37075</p> <p>Other Places of Business:</p> <p>Novelis Benelux: Novelis Deutschland GmbH Rijksstraatweg 7 3316 EE Dordrecht The Netherlands</p> <p>Novelis Deutschland GmbH Market Centre Finland, sivuliike Suomessa c/o Visma Employee Management Oy Elielinaukio 5 B 00100 Helsinki Finland</p> <p>Novelis Deutschland GmbH Werk Luedenscheid Wiesenstrasse 24-30 58507 Luedenscheid Germany</p> <p>Novelis Deutschland GmbH Werk Nachterstedt Gaterslebener Strasse 1 06469 Stadt Seeland, OT Nachterstedt Germany</p> <p>Novelis Deutschland GmbH Standort Stuttgart Mittlerer Pfad 19 70499 Stuttgart-Weilimdorf</p>

	Germany Novelis Deutschland GmbH Werk Ohle Am Eisenwerk 30 58840 Plettenberg Germany
Loan Party	Address
Novelis Sheet Ingot GmbH	Novelis Sheet Ingot GmbH Werk Nachterstedt OT Nachterstedt Gaterslebener Strasse 1 06469 Stadt Seeland Germany

Additional Locations of Equipment and Inventory.

Loan Party	Address
Novelis Deutschland GmbH	Aluminium Norf GmbH Koblenzer Strasse 120 41468 Neuss Deutschland

Locations of Inventory and Equipment in Possession of Persons Other Than Any Loan Party.

Loan Party	Address
Novelis Deutschland GmbH	<p><u>Third Party in Possession regarding Gottingen Norf (inventory under Norf is property of Novelis Deutschland GmbH):</u></p> <p>Inventory at forwarding agencies:</p> <p>Friedrich Zufall GmbH & Co. KG, Internationale Spedition, Am Güterverkehrszentrum 10 D- 37079 Gottingen</p> <p>Goeldner Spedition + Logistik GmbH Tilsiter Str. 13 41460 Neuss</p> <p>Navis Schifffahrts & Spedition AG (CPS Conpac Port Service GmbH) Buchheisterstrasse 12 20457 Hamburg</p> <p>Warehouses for raw material (scrap):</p> <p>UCT Umschlag Container Terminal GmbH, Sachtlebenstrasse 34, 4 154 1 Dormagen</p> <p>REAL ALLOY GERMANY GMBH ALUMINIUMSTRASSE 3 41515 GREVENBROICH</p> <p>BAGR Berliner Aluminiumwerk GmbH Kopenhagener Strasse 59 13407 Berlin</p>

Loan Party	Address
	<p>Biewer Industrie & logistik GmbH Dieselstrasse 6 40721 Hilden</p> <p>Curef GmbH Im Schulzenrode 4 34346 Hann-Münden</p> <p>Scholz Recycling AG & Co KG Otto-Han Str. 11 41515 Grevenbroich</p> <p>Magdeburger Hafen GmbH</p>

	<p>Saalestraße 20 39126 Magdeburg</p> <p>AHV Aluminium-Handelsvertretung Friedrich von der Schulenburg Str. 7 D-41466 Neuss Germany</p> <p>ALBA Metall Nord GmbH Emsstr. 29 26382 Wilhelmshaven Germany</p> <p>AMS Metal Sp. z o.o. ul. Chemiczna 5 41-100 Siemianowice Śl. Poland</p> <p>MÜLLER & SOHN GmbH & Co. KG METALL-AUFBEREITUNGSWERK Harkortstraße 22 45549 Sprockhövel Germany</p> <p>E. Scharrenberg GmbH & Co. KG Industriestraße 35 D-40822 Mettmann Germany</p> <p>Inventory with consignment customers:</p> <p>Kodak Graphic Communicatoin GmbH Betrieb Osterode An der Bahn 80 37520 Osterode am Harz</p> <p>Ardagh Metal Beverage Europe GmbH, Zweigniederlassung Braunschweig, Hamburger Str. 36-41, 3 8 1 14 Braunschweig</p> <p>Henco Industries n.V. Toekomstlaan 27 2200 Herentals Belgien Eddie Stobart Ltd.,</p>
--	--

Loan Party	Address
	<p>Stobart Warehousing, Hawleys Lane, WA2 8JP Warrington, Cheshire, United Kingdom (consignment stock for customers Ball Deeside, Ball Whrexam, Crown Botcherby and Crown Braunstone)</p> <p>Inventory with commission processor (Lohnveredler)</p> <p>NBB-Norder Band- und Blechverarbeitung GmbH Blaufärber Straße 2 26506 Norden</p> <p>Coil GmbH Claude Breda Straße 1 06406 Bernburg</p> <p><u>Third Party in Possession regarding Lüdenscheid</u></p> <p>HAAF STS Logistik GmbH Lager Bärenstein Halle 1 Ladepunkt 1.2 Bärenstein 5 58791 Werdohl</p> <p><u>Third Party in Possession regarding</u></p>

	<p><u>Nachterstedt</u></p> <p>Inventory with consignment customers:</p> <p>M. Preymesser GmbH & Co. KG Anton-Tucher-Str 1 D-28309 Bremen</p> <p>Eddie Stobart Ltd Rail Port Approach Dirft South Crick Northamptonshire NN6 7ES GB</p> <p>Preymesser GmbH & Co. KG Edisonstr. 1 85098 Großmehring Germany</p> <p>M. Preymesser GmbH & Co. KG Hafenstr. 95 D-74078 Heilbronn</p>
--	---

Loan Party	Address
	<p>M. Preymesser GmbH & Co. KG Industriestr. 3 D-84 180 Loiching</p> <p>Ardagh Metal Beverage Europe GmbH Zweigniederlassung Braunschweig Karl Schmidt Str 15 D-38 114 Braunschweig</p> <p>M. Preymesser GmbH & Co. KG Otto-Lilienthal-Str. 34 D-71034 Böblingen</p> <p>Stahl Zentrum Glauchau GmbH & Co. KG Peniger Str. 17 D-08371 Glauchau</p> <p>Läpple Blechverarbeitung GmbH & Co. KG Bayern August Läpple Platz 1 D-93 158 Teublitz</p> <p>SMK Stahlmagazin GmbH Von-Miller Str. 3 1 D-67661 Kaiserslautern</p> <p>Eddie Stobart Ltd, Stobart Warehousing, Hawleys Lane, WA2 8JP Warrington, Cheshire, United Kingdom</p> <p>SMH Stahlmagazin Hannover Industriestrasse 2 30928 Seelze – Letter</p> <p>Preymesser Hungaria Logisztikai Kft., Dorogi Ipari Park 2, Ütem 2510 Dorog Hungary</p> <p>Magna Hofstätten, Jerich Austria GmbH, Pirchling 91 8200 Hofstätten Austria</p> <p>Volvo Car Corporation, Sölvesborgs Stuveri & Hamn AB, SE 29435 Sölvrborgs, Lilleviksvägen Sweden</p> <p>Obermann Logistik GmbH</p>

	Rolandsweg 3-7D 37520 Osterode Magna Heavy Stamping Frank-Stronach-Strasse 1 Albersdorf bei Gleisdorf
Loan Party	Address
	AT 8200 ACT Container Terminal GmbH Teife Breite 1 37139 Adelebsen Inventory with commission processor (Lohnveredler) Thyssen Krupp Metallcenter GmbH Am Oberwald 1 76744 Wörth Third Party in Possession regarding Plettenberg Ohle: Inventory and consignment arrangements: Kühne & Nagel AG & Co. Spannstiftstr. 1 – 39 D-58 119 Hagen VA RNI Vermittlungsagentur Ronald Niederlehner Roßkamphof 3 30519 Hannover

IV. Swiss Loan Parties

Loan Party	Address
Novelis AG	Sternenfeldstrasse 19, 8700 Küsnacht, Switzerland
Novelis Switzerland SA	Route des Laminaires 15, CH3960 Sierre, Switzerland
Novelis Switzerland SA	Novelis Switzerland SA Sous G�ronde Sierre, Switzerland

Additional Locations of Equipment and Inventory.

Scrap, prime, sheet ingot and hardeners are currently being procured and stored at the below listed warehouses on behalf of Novelis AG.

Loan Party	Address
Novelis AG	Novelis Sheet Ingot GmbH OC Nachterstedt Gaterslebener Str. 1 06469 Stadt Seeland Germany

<u>Locations of Collateral in Possession of Persons Other Than Any Loan Party.</u>	<u>Name of Entity in Possession of Collateral/Capacity of such Entity</u>	<u>Country</u>
Novelis Switzerland SA	PREYMESSER GMBH. CO KG SPEDITION HAFENSTRASSE 95 74076 HEILBRONN	Germany
	M. PREYMESSER GmbH & Co. KG Anton-Tucher-Str. 1 28309 BREMEN	Germany
	M. Preymesser GmbH & Co. KG SPEDITION Edison Strasse 1	Germany

	85098 Grossmering	
	BMW AG C/O M. PREYMESSER GMBH. & CO KG SPEDITION INDUSTRIESTRASSE 3 84180 LOICHING	Germany
	LAEPPLE BLECHVERARBEITUNG GMBH & CO. KG BAYERN AUGUST-LAEPPLE- PLATZ 1 93158 TEUBLITZ	Germany
	Daimler AG Werk Sindelfingen c/o Preymesser GmbH&Co.KG Otto Lilienthalstrasse 4 71034 Boeblingen	Germany
	Sölverborg Stuveri & Hamm AB Ytterhammen SE-294 35 Sölvesborg	Sweden
	Eddie Stobart Ltd, Dirft Eddie Stobart Ltd., Railport Approach, Dirft South, Northamptonshire, NN6 7ES	UK
	Magna Heavy Stamping Frank Stronach Strasse 1 8200 Albersdorf	Austria
	Constantin Transport AG	Switzerland
<u>Locations of Collateral in Possession of Persons Other Than Any Loan Party</u>	<u>Name of Entity in Possession of Collateral/Capacity of such Entity</u>	<u>Country</u>
	Gemmistrasse 20 3970 Salgesch	
Novelis AG	Biewer Industrieservice Dieselstr. 6 40721 Hilden Germany	Germany
Novelis AG	UCT Umschlag Container Term GmbH Sachtlebenstr. 34 41541 Dormagen Germany	Germany
Novelis AG	Magdeburger Hafen GmbH Saalestrasse 22 39126 Magdeburg Germany	Germany
Novelis AG	TAS GmbH Majoranweg 5-7 06449 Aschersleben Germany	Germany

V. **English Loan Parties**

Loan Party	Address	County
Novelis UK Ltd	LATCHFORD LOCK WORKS THELWALL LANE WARRINGTON CHESHIRE UNITED KINGDOM WA4 1NN	
Novelis UK Ltd	Hawthorns House, Hawthorns Business Center, Halfords Lane, Industrial Estate, Smethwick, West Midlands, B66 1BB, UK	West Midlands

Locations of Equipment or Inventory in Possession of Persons Other Than Any Loan Party

Loan Party	Address	Country
Novelis UK Ltd	ACE Brightwaste Whins Road Alloa Clackmannanshire FK10 3TA	United Kingdom
	Thamesdown Recycling Kingshill Cricklade Swindon SN6 6JR	United Kingdom

Loan Party	Address	Country
	Real Alloy UK Ltd. Wanarlwydd Works Wanarlwydd Swansea , Uk SA5 4YG	United Kingdom
	Befesa Salt Slags Limited Registered Office Fenns bank Whitchurch Shropshire SY13 3PA	United Kingdom
	Edwards Engineering NW Ltd Units 1,2,3 BLOCK D ST Michaels Industrial Estate Widnes WA8 8TL	United Kingdom
	Central Engineering Products Ltd Burton Street Leek ST13 8DA	United Kingdom
	TAB refractory construction co Ltd Unit 7 Parkdale Industrial Estate Wharf Street Warrington Cheshire WA1 2HT	United Kingdom
	European Metal Recyclers Grandstand Works Herries Road South Sheffield S6 1QG	United Kingdom
	European Metal Recyclers Manor Road Erith Kent DA8 2AD	United Kingdom
	Metal and Waste Recycling Halesfield 2 Telford Shropshire TF7 4QH	United Kingdom
	EMR Darlaston Bentley Road South, Darlaston, Darlaston, WS10 8LW	United Kingdom
	EMR Manchester (Salford) West Egerton Street, Salford, Salford, M5 4DY	United Kingdom
	EMR Blackburn Gorse Street, Blackburn, BB1 3EU	United Kingdom
Loan Party	Address	Country

	8535 Russellville Road Guthrie, KY 42234	USA
	MMP Casting Facility (Solatens): 16004 E. Euclid Avenue Spokane, Washington 99216	USA
	Oswego Sheet Products Plant: 448 County Route 1A (Lake Road North) Oswego, New York 13126	USA
	Terre Haute Light Gauge Plant: 5901 North 13th Street Terre Haute, Indiana 47805	USA
	Warren Sheet Products Plant: 390 Griswold Street, NE Warren, Ohio 44483	USA
	Logan Aluminum Inc. (Joint Venture) US Highway 431 North Russellville, Kentucky 42276	USA
	Other Places of Business: Automotive Value Stream/Oswego Woodhaven Lab 25325 Hall Road Woodhaven, Michigan (sublease of approximately 1800 sq. ft.	USA
Loan Party	Address	Country
	feet)	

Novelis Corporation

2082 County Route
Oswego, New York 13126
1
(Oswego Wellness Center)

Locations of Inventory or Equipment in Possession of Persons Other Than Any Loan Party.

Loan Party	Address	Country
Novelis Corporation	ADS Logistics Co, LLC 2100 Design Road ARLINGTON, Texas 76014	USA
	ADS Logistics Co., LLC 13899 Corporate Woods Trail BRIDGETON, Missouri 63044	USA
	Alexin, LLC 1390 South Adams Street BLUFFTON, Indiana 46714	USA
	Aluminum Blanking Co., Inc. 360 West Sheffield Avenue PONTIAC, Michigan 48340	USA
	Alumisource Corporation 1201 Donner Avenue MONESSEN, Pennsylvania 15062	USA
	Alumisource Corporation 2000 Enterprise Drive RICHMOND, Kentucky 40475-8803	USA
	American Utility Processing, LLC 1246 Princeton St. AKRON, Ohio 44301	USA
	Arin Inc. 29139 Calahan Road ROSEVILLE, Michigan 48066	USA
	Autolum Processing Co. dba Ferrolux Co. of Michigan, LLC 27800 West Jefferson Avenue GIBRALTAR, Michigan 48173	USA

	BSI Mechanical, Inc. 319 State Route 104A HANNIBAL, New York 13074	USA
	Champagne Metals, LLC 51360 Greenfield Drive MIDDLEBURY, Indiana 46540	USA

Loan Party	Address	Country
	CMI Logistics LLC 555 Gellhorn Drive HOUSTON, Texas 77029	USA
	CMI Logistics LLC 4900 S. Boyle Avenue VERNON, California 90058	USA
	CMI Logistics LLC 8462 S. 190 th Street KENT, Washington 98031	USA
	D & S Delivery Service, Inc. 32925 Schoolcraft Road LIVONIA, Michigan 48150	USA
	Delaco Integrated Terminals, L.L.C. 25325 Hall Road WOODHAVEN, Michigan 48183	USA
	DKP Buffalo LLC 175 Ensminger Road TONAWANDA, New York 14150-6719	USA
	DKP Indiana, LLC 5146 Maritime Road JEFFERSONVILLE, Indiana 47130	USA
	Dockside Logistics, LLC 1301 Charleston Regional Parkway CHARLESTON, South Carolina 29492	USA
	Doty Contracting, LLC/Great Bear Industries LLC 123 Great Bear Road FULTON, New York 13069	USA
	Empire Recycling Corporation 64 North Genesee Street UTICA, New York 13503	USA
	Equinix Data Center 180 Peachtree Road ATLANTA, Georgia 30303	USA
	Ferrous Processing and Trading Company 9100 John Kronk Street DETROIT, Michigan 48210 (Parent of SLC Recycling Industries, Inc.)	USA
	General Products Corporation 188 Earl Davis Drive RUSSELLVILLE, Kentucky 42276	USA
	HTI Logistics Corporation 7200 Riverport Drive LOUISVILLE, Kentucky 40258	USA
	Inland Empire Distribution Systems 3808 N. Sullivan Road, Bldg #2	USA

Loan Party	Address	Country
	SPOKANE, Washington 99216	
	Imsamet, Inc 3829 S. Estrella Pkwy GOODYEAR, Arizona 85338	USA

Jaro Transportation Services, Inc. 801 Post Road NW WARREN, Ohio 44483	USA
JMAR Investments, LLC 1371 Willow Run Road GREENSBORO, Georgia 30642	USA
Keith Titus Corporation 2548/2562 East Main Street CATO, New York 13033	USA
Keith Titus Corporation d/b/a Page Material Management LLC 1061 Industrial Blvd. UNION POINT, Georgia 30669	USA
Laser Transit Ltd. 363 Demott Street, LACONA, New York 13083	USA
Laser Transit Ltd. 364 East Ave. OSWEGO, New York 13126	USA
Lock City Trucking Inc. 179 Oakhurst Street LOCKPORT, New York 14094	USA
Logan Aluminum Inc. U.S. Hwy. 431 N. RUSSELLVILLE, Kentucky 42276	USA
Logistics One Warehousing, Inc. 33 Cady Hill Blvd. SARATOGA SPRINGS, New York 12866	USA
Louis Padnos Iron and Metal Company 500 44 th Street NW WYOMING, Michigan 49548	USA
Mahle Behr Dayton L.L.C. 1600 Webster Street DAYTON, Ohio 45404	USA
Malcom Lee Sweetapple 1120 Kevin Roberts Way GREENSBORO, Georgia 30642	USA
Material Sciences Corporation 2200 East Pratt Blvd. ELK GROVE VILLAGE, Illinois 60007	USA
Material Sciences Corporation	USA

Loan Party	Address	Country
	30610 E. Broadway Street WALBRIDGE, Ohio 43465	
	Oswego Industries, Inc. 7 Morrill Place FULTON, New York 13069	USA
	Owl's Head Alloys, Inc. 187 Mitch McConnell Way BOWLING GREEN, Kentucky 42101	USA
	The Port of Oswego Authority 1 East 2nd Street OSWEGO, New York 13126 (State entity)	USA
	Precision Strip Inc. 4001 Hardison Road WOODBURN, Kentucky 42170	USA
	Precision Strip Inc. 36000 Alabama Highway 21 TALLADEGA, Alabama 35160	USA

Precision Strip Inc. 86 South Ohio Street MINSTER, Ohio 45865	USA
Precision Strip Inc. 7401 Ponderosa Rd PERRYSBURG, Ohio 43551	USA
Precision Strip Inc. 315 Park Avenue TIPP CITY, Ohio 45371	USA
Precision Strip Inc. 190 Bales Road KENTON, Ohio 43326	USA
Precision Strip Inc. 3518 West 73 rd Street ANDERSON, Indiana 46013	USA
Precision Strip Inc. 25325 Hall Road WOODHAVEN, Michigan 48183	USA
Precision Strip Inc. 417 Scotty's Way BOWLING GREEN, Kentucky 42101	USA
Precoat Metals Corp. 1950 E. Main Street GREENFIELD, Indiana 46140	USA
Precoat Metals Corp. 4301 South Spring Avenue ST. LOUIS, Missouri 63116	USA

Loan Party	Address	Country
Progress Rail Services Corporation 874 Substation Road ALBERTVILLE, Alabama 35950		USA
Progress Rail Services Corporation 1900 Front Street ASHLAND, Kentucky 41101		USA
Quantum Metals, Inc. 3675 Taft Drive LEBANON, Ohio 45036		USA
R&A Trucking Company 1050 77 th Avenue OAKLAND, California 94621		USA
Real Alloy Recycling, Inc. 283 Industrial Park FRIENDLY, West Virginia 26146		USA
Real Alloy Recycling, Inc. 388 Williamson Drive LOUDON, Tennessee 37774		USA
Real Alloy Recycling, Inc. 805 Gardner Lane MORGANTOWN, Kentucky 42261		USA
Real Alloy Recycling, Inc. 267 N. Fillmore Rd. COLDWATER, Michigan 49036		USA
River Metals Recycling LLC 2045 River Road LOUISVILLE, Kentucky 40206		USA
Revell Oil and Construction Inc. 1949 County Route 1 OSWEGO, New York 13126		USA
R.J. Corman Distribution Centers, LLC 444 N. Hardison Road WOODBURN, Kentucky 42170		USA

	RSDC of Michigan L.L.C. 1775 Holloway Drive HOLT, Michigan 48842	USA
	Scepter New York, Inc. 11 Lamb Road SENECA FALLS, New York 13148	USA
	Scepter, Inc. 1485 Scepter Lane WAVERLY, Tennessee 37185	USA
	Scepter, Inc. 6467 North Scepter Road BICKNELL, Indiana 47512	USA

Loan Party	Address	Country
	Scepter Greenville, Inc. 1230 Pottertown Road MIDWAY, Tennessee 37809	USA
	SLC Recycling Industries, Inc. Ferrous Processing & Trading 8701 E. Eight Mile WARREN, Michigan 48089	USA
	Smelter Service Corporation Corp. 400 Arrow Mines Road MT. PLEASANT, Tennessee 38474	USA
	SRT Aluminum, LLC 50 Dimension Avenue WABASH, Indiana 46992	USA
	Stagecoach Cartage and Distribution LP 7167 Chino Drive EL PASO, Texas 79915	USA
	T, C & G Enterprises Ltd. 105 Hi-Lane, RICHMOND, Kentucky 40475	USA
	Tennessee Aluminum Processors, Inc. 205 Spurline Drive GADSDEN, Alabama 35903	USA
	Tennessee Aluminum Processors, Inc. 7207 Hoover Mason Road MT. PLEASANT, Tennessee 38474	USA
	Thyssen Krupp Materials North America Inc. ONE Thyssen Park DETROIT, Michigan 48210	USA
	TitanX Engine Cooling Inc. 1089 Allen Street JAMESTOWN, New York 17401	USA
	TK Automotive Logistics Solutions. LLC 13710 IH35 Frontage Road LAREDO, Texas 78045	USA
	TK Automotive Logistics Solutions. LLC 12013 General Milton Drive LAREDO, Texas 78045	USA
	Transportation Management Services, Incorporated 16600 Table Mountain Parkway GOLDEN, Colorado 80403	USA
	Universal Scrap Metals, Inc. 2500 W. Fulton CHICAGO, Illinois 60612	USA
	USM Alumacycle, LLC	USA

Loan Party	Address	Country
------------	---------	---------

	109 Triport Road GEORGETOWN, Kentucky 40326	
	Wagstaff, Inc. 4657 No. Bend Road HEBRON, Kentucky 41048	USA
	Wayne Industries Inc. 36253 Michigan Avenue WAYNE, Michigan 48187	USA
	Wayne Steel Distribution Center, Inc. 21901 Cottage Grove Avenue SAUK VILLAGE, Illinois 60411	USA
	Windspeed Logistics, L.L.C. Agents for Cowan Systems, LLC 5107 North Point Blvd. BALTIMORE, Maryland 21213	USA
	The Worthington Steel Company, LLC 1501 Made Drive MIDDLETOWN, Ohio	USA
	National Materials of Mexico, S. de R.L. de C. V.Carrerera A Sahuaripa #370 Parque Industrial Hermosillo Hermosillo, Sonora, Mexico C.P. 83290	USA
	Acero Prime, S. de R.L. de C.V. Av Gamma No. 527 Parque Industrial Santa Maria Ramos Arizpe, Coahuila, Mexico C.P. 25900	Mexico
	Acero Prime, S. de R.L. de C.V. Av. Albert Einstein s/n Zona Industrial Toluca Toluca, Edo. De Mexico CP 50160	Mexico
	Acero Prime, S. de R.L. de C.V. Eje 128# 209, Zona Industrial del Potosi San Luis Potosi, SLP CP 78090	Mexico

Schedule 5.11(b)
Certain Subsidiaries

Legal Restrictions on pledge of Equity Interests

A. People's Republic of China

1. Novelis (Shanghai) Aluminum Trading Co., Ltd (China)
2. Novelis (China) Aluminum Products Co., Ltd. (China)

Legal Restrictions on status as Loan Party

A. People's Republic of China

3. Novelis (Shanghai) Aluminum Trading Co., Ltd (China)
4. Novelis (China) Aluminum Products Co., Ltd. (China)

B. Socialist Republic of Vietnam

1. Novelis Vietnam Company Limited (Vietnam)

C. Republic of Korea

1. Novelis Korea Limited (South Korea)
2. Ulsan Aluminum Ltd. (South Korea)

Schedule 5.16

Post-Closing Covenants

Notwithstanding anything to the contrary in the Credit Agreement or in any other Loan

Document, to the extent not delivered, filed or completed on the Amendment No. 2 Effective Date, each applicable Loan Party shall perform the obligations set forth below, as soon as commercially reasonable, but in no event later than the date specified after the Amendment No. 2 Effective Date applicable to each item set forth below.

1. BRAZIL

- (a) Within 30 days (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) following the execution by the Collateral Agent and the Term Loan Collateral Agent of powers of attorney granted to one or more paralegals employed by PacaembuCNC in Brazil (the “**Designated Paralegal**”), and the apostillation, consularization, notarization and protocolization of such power of attorney, Novelis do Brasil Ltda., on behalf of the Collateral Agent, shall obtain the sworn translation into Portuguese and registration before the competent Registry of Deeds and Documents of such power of attorney for the execution of amendments to the Brazilian Security Agreements (the “**Brazilian Amendments**”) to reflect the terms contemplated by Amendment No. 2.
- (b) Within 30 days (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) following the Specified Incremental Commitment Availability Date, the Canadian Borrower shall obtain the apostillation, consularization, notarization, protocolization and sworn translation into Portuguese and registration before the competent Registry of Deeds and Documents of a power of attorney for the execution the Brazilian Amendment relating to the quota pledge agreement.
- (c) Within 30 days following the later of the registration of the power of attorney described in item 1(a) and item 1(b) above (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the execution of the Brazilian Amendments, each in form and substance reasonably satisfactory to the Collateral Agent, by Novelis do Brasil Ltda., the Canadian Borrower, as applicable, and the Collateral Agent, through the Designated Paralegal, under the supervision of TozziniFreire Advogados.
- (d) Within 30 days following the execution of each Brazilian Amendment (other than those relating to the equipment and inventory pledge agreement and the Brazilian mortgage) required by item 1(c) above (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis do Brasil Ltda. shall obtain the sworn translation into Portuguese and registration before the competent Registry of Deeds and Documents of such Brazilian Amendment.
- (e) Within 60 days following the execution of the Brazilian Amendments relating to
 - (i) the equipment and inventory pledge agreement and (ii) the Brazilian mortgage (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis do Brasil Ltda. shall obtain the sworn translation into Portuguese, as applicable, and registration before the competent Registry of Real Estate of such documents, unless otherwise provided in such Brazilian Amendment.
- (f) At the time of execution of the Brazilian Amendments, Novelis do Brasil Ltda. shall deliver a favorable written opinion of Brazilian counsel and addressed to the Agents, Issuing Banks and the Lenders, covering such matters relating to the Brazilian Amendments and other Loan Documents as the Administrative Agent shall reasonably request.
- (g) Within 30 days following the execution of the Brazilian Amendment relating to the quota pledge agreement (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the registration of an amendment of Novelis do Brasil Ltda.’s Articles of Association to reflect the quota pledge agreement amendment shall be completed.

2. ITALY

- (a) Within 30 days from the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) Novelis Europe Holdings Limited and Novelis Deutschland (the “**Italian Pledgors**”) shall execute and deliver to the Administrative Agent a deed of acknowledgment and amendment of the original share pledge agreement originally dated March 10, 2017 (as from time to time amended and/or supplemented), governed by Italian law and reasonably satisfactory in form and substance to the Collateral Agent. Within 10 Business Days following the date of execution of such deed of acknowledgment and amendment of the original share pledge agreement (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Italian Pledgors shall deliver to the custodian named in the original share pledge agreement (or to an attorney of the Collateral Agent for delivery to such custodian) the share certificates representing the shares of Novelis Italia S.p.A. endorsed by way of security in favor of the Secured Parties.
- (b) Concurrently with the execution of the deeds of amendment referred to in items 2(a) above and item 2(d) below, the Administrative Agent shall have received a favorable written opinion of Italian counsel addressed to the Agents, Issuing Banks and the Lenders, covering such matters relating to such deeds and the other Loan Documents as the Administrative Agent shall reasonably request.
- (c) Within 10 Business Days following the date of endorsement of the share certificates representing the shares of Novelis Italia S.p.A. to be pledged pursuant to the deed of acknowledgment and amendment of the original share pledge agreement described in item 2(a) above (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Italian Pledgors shall deliver to the Collateral Agent notarized copies or excerpts of the pages of the shareholders’ ledger of Novelis Italia S.p.A. in which such pledge has been registered.
- (d) Within 30 days from the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) Novelis Italia S.p.A. (the “**Novelis Italia Pledgor**”) shall execute and deliver to the Administrative Agent a deed of acknowledgment and amendment of the original pledge agreement over Novelis Italia Pledgor’s bank account originally dated December 17, 2010 (as from time to time amended and/or supplemented), governed by Italian law and reasonably satisfactory in form and substance to the Collateral Agent.
- (e) Within 5 Business Days following the entry into the amendment described in item 2(a) above (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis European Holdings Limited shall deliver to the Administrative Agent evidence that the amendment described in item 2(a) above and prescribed particulars of it have been delivered to the UK Registrar of Companies.

3. FRANCE

- (a) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the renewal for a new 5 year-period of the security interest registration made with the clerk of the commercial court of Grenoble in relation to the first priority pledge granted over its stock (the “**First Priority Stock Pledge**”) pursuant to that certain pledge of stock without dispossession agreement (*contrat de gage de stock sans dépossession*), dated December 17, 2010, between, inter alios, Novelis PAE S.A.S. (as pledgor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary) (as successor, in such capacity, to Bank of America, N.A.).
- (b) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the renewal for a new 5 year-period of the security interest registration made with the clerk of the commercial court of Grenoble in relation to the second priority pledge granted over its stock (the “**Second Priority Stock Pledge**”) pursuant to that certain second priority pledge of stock without dispossession agreement (*contrat de gage de stock sans dépossession de second rang*), dated May 13, 2013, between, inter alios, Novelis PAE S.A.S. (as pledgor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary).
- (c) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion),

Novelis PAE S.A.S. shall have arranged for the renewal for a new 5 year-period of the security interest registration made with the clerk of the commercial court of Grenoble in relation to the third priority pledge granted over its stock (the “**Third Priority Stock Pledge**”) pursuant to that certain third priority pledge of stock without dispossession agreement (*contrat de gage de stock sans dépossession de troisième rang*), dated October 6, 2014, between, inter alios, Novelis PAE S.A.S. (as pledgor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary).
- (d) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mentions en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the First Priority Stock Pledge in order to reflect the relevant amendments under Amendment No. 2.

- (e) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mentions en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the Second Priority Stock Pledge in order to reflect the relevant amendments under Amendment No. 2.
- (f) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mentions en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the Third Priority Stock Pledge in order to reflect the relevant amendments under Amendment No. 2.
- (g) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mention en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the first priority pledge granted over its ongoing business pursuant to that certain first priority charge over business agreement (*acte de nantissement de fonds de commerce de premier rang*), dated December 17, 2010, between, *inter alios*, Novelis PAE S.A.S. (as chargor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary) (as successor, in such capacity, to Bank of America, N.A.), in order to reflect the relevant amendments under Amendment No. 2.
- (h) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mention en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the second priority pledge granted over its ongoing business pursuant to that certain second priority charge over business agreement (*acte de nantissement de fonds de commerce de second rang*), dated May 13, 2013, between, *inter alios*, Novelis PAE S.A.S. (as chargor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary), in order to reflect the relevant amendments under Amendment No. 2.
- (i) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the registration of modifications (*mention en marge*) to the security interest registration made with the clerk of the commercial court of Grenoble in relation to the third priority pledge granted over its ongoing business pursuant to that certain third priority charge over business agreement (*acte de nantissement de fonds de commerce de troisième rang*), dated October 6, 2014, between, *inter alios*, Novelis PAE S.A.S. (as chargor) and Wells Fargo Bank, National Association (as French collateral agent and beneficiary), in order to reflect the relevant amendments under Amendment No. 2.
- (j) Within 15 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the filing of the fifth priority charge over business (*acte de nantissement de fonds de commerce de cinquième rang*), dated as of the date hereof, between Novelis PAE S.A.S. and the French Collateral Agent (“**Fifth Priority Charge Over Business Agreement**”) with the French tax authorities.
- (k) Within 15 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the filing of the Fifth Priority Charge Over Business Agreement with the clerk of the commercial court of Grenoble.
- (l) Within 15 days following the filing of the Fifth Priority Charge Over Business Agreement with the clerk of the commercial court of Grenoble (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the filing of the Fifth Priority Charge Over Business Agreement with the relevant IP authorities in France.
- (m) Within 15 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), Novelis PAE S.A.S. shall have arranged for the filing of the fifth priority pledge of stock without dispossession (*contrat gage de stock sans dépossession de cinquième rang*), dated as of April 15, 2019, between Novelis PAE S.A.S. and the French Collateral Agent, with the clerk of the commercial court of Grenoble.

4. MEXICO

- (a) Within 60 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the power of attorney to be granted by Novelis Corporation (the “**Assignor**”) (the “**Assignor POA**”) for the execution of the Fourth Amendment Agreement to the Assignment Agreement (the “**Fourth Amendment Agreement**”) shall have been properly granted, notarized and apostilled in the United States, and then translated into Spanish and protocolized (formalized) in Mexico before a Mexican notary public, in form and substance reasonably acceptable to the Collateral Agent.

- (b) In connection with the Fourth Amendment Agreement, the Collateral Agent will execute a customary secretary's certificate and power of attorney (the "**Agent POA**"), in form satisfactory to the Collateral Agent. Both documents will then be notarized and apostilled. The Agent POA will be translated into Spanish and protocolized (formalized) before a Mexican notary public.
- (c) Within 30 days (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) following the later of the protocolization of (a) the Assignor POA and (b) the Agent POA, Assignor and the Collateral Agent shall have executed the Fourth Amendment Agreement in form and substance reasonably acceptable to the Collateral Agent.
- (d) Concurrently with the execution of the Fourth Amendment Agreement, the Assignor shall have caused its Mexican counsel and its Texas counsel to issue and deliver legal opinions required under the Fourth Amendment Agreement, in form and substance reasonably acceptable to the Collateral Agent.
- (e) Concurrently with the execution of the Fourth Amendment Agreement, the Assignor shall issue a secretary's certificate, certifying as to good standing, the approval of the execution of the Fourth Amendment Agreement and its corresponding assignment, and incumbency, in form and substance reasonably acceptable to the Collateral Agent.
- (f) Within 20 days following the date that the Fourth Amendment Agreement is executed (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Assignor shall take all appropriate actions (as reasonably requested by the Collateral Agent), to assist the Collateral Agent in notifying Assignor's debtors derived from purchase orders and/or sales agreements of the existence of the Fourth Amendment Agreement, through a Mexican Notary Public, in form and substance reasonably acceptable to the Collateral Agent.
- (g) Within 20 days following the date that the Fourth Amendment Agreement is executed (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Assignor shall have caused its Mexican counsel to issue and deliver the corresponding legal opinion in respect of the notices made to such Assignor's debtors, as required under the Fourth Amendment Agreement, and in form and substance reasonably acceptable to the Collateral Agent.
- (h) Within 20 days following the date that the Fourth Amendment Agreement is executed (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Assignor shall take all appropriate actions (as reasonably requested by the Collateral Agent), to register, and to assist the Collateral Agent in the registration of, the Fourth Amendment Agreement before the Mexican Registry of Guaranteed Personal Property (RUG).

5. GERMANY

- (a) By 11:59 p.m. New York City time on the Amendment No. 2 Effective Date the Administrative Agent shall have received a favorable written opinion of German counsel addressed to the Agents, Issuing Banks and the Lenders, covering such matters relating to the documents as the Administrative Agent shall reasonably request.
- (b) Novelis Deutschland shall use commercially reasonable efforts to obtain and provide the Collateral Agent with an executed amendment to the warehouse keeper agreement with Aluminium Norf GmbH (originally dated August 6, 2013 (as amended from time to time)) – including the acknowledgement thereof by Hydro Aluminium Rolled Products GmbH.
- (c) No later than 10 Business Days after the Amendment No. 2 Effective Date (or, in each case, such longer period as may be agreed to by the Administrative Agent in its sole discretion):
 - (i) each pledgor named in the Account Pledge Agreement among, inter alios, Novelis Deutschland, Novelis AG, Novelis Aluminium Holding Unlimited Company, the Canadian Borrower, Novelis Sheet Ingot GmbH, and the Collateral Agent shall, to the extent necessary to perfect the Collateral Agent's pledges, execute and deliver notices to each account bank named therein notifying them of the pledges thereunder;
 - (ii) Novelis AG as Assignor under the Assignment of Receivables, dated as of April 15, 2019, among inter alios, Novelis AG and the Collateral Agent, shall deliver to the Collateral Agent 10 notarially certified and 10 uncertified certificates in the form specified in Clause 6.1 of the Assignment of Receivables;
 - (iii) Novelis Deutschland as Assignor under the Global Assignment of Receivables and Insurance Claims, dated as of April 15, 2019, among, inter alios, Novelis Deutschland and the Collateral Agent, shall deliver to the Collateral Agent 10 duly signed Blank Notification Letters in the form specified in Schedule 1 of the Global Assignment of Receivables and Insurance Claims; and
 - (iv) Novelis Sheet Ingot GmbH as Assignor under the Global Assignment of Receivables and Insurance Claims among, inter alios, Novelis Sheet Ingot

GmbH and the Collateral Agent, shall deliver to the Collateral Agent 10

duly signed Blank Notification Letters in the form specified in Schedule 1 of the Global Assignment of Receivables and Insurance Claims.

6. IRELAND

- (a) Within 5 Business Days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Designated Company shall deliver to the Administrative Agent an agreed form C1 template, from each Irish Guarantor with respect to each relevant Security Document to which it is a party that must be registered pursuant to section 408 of the Irish Companies Act 2014 (with evidence that each such form C1 has been filed at the Irish Companies Registration Office to follow within 3 days of making the filing).
- (b) Within 3 Business Days following the filing of the relevant Form C1 in the Irish Companies Registration Office (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) deliver a notice pursuant to section 1001 of the Taxes Consolidation Act 1997 in respect of the relevant Security Documents to the Irish Revenue Commissioners.

7. UNITED ARAB EMIRATES (DIFC)

- (a) Within 30 days from the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion) the Dubai Guarantor and, if necessary, the Designated Company, shall arrange for the registration of modifications to the security interest registration made with the DIFC Security Registrar in relation to the Dubai Security Agreements.

8. UNITED STATES

- (a) Within 30 days following the Amendment No. 2 Effective Date (or such longer period as may be agreed to by the Administrative Agent in its sole discretion), the Loan Parties party to U.S. law governed intellectual property security agreements shall, to the extent reasonably requested by the Administrative Agent, execute and deliver new or supplemental short form intellectual property security agreements, and/or amendments to or amendments and restatements of existing intellectual property security agreements, each in form and substance reasonably satisfactory to the Administrative Agent and in proper form for filing with the applicable U.S. intellectual property filing office.

Schedule 6.01(b) Existing Indebtedness

Lender	Borrower	Currency	Amount	Issue Date	Maturity	Description
ASIA						
Bank of China	Novelis Korea Limited	KRW	14,000,000,000		1/29/2019	Facility Loan
KEB Bank	Novelis Korea Limited	KRW	600,000,000		6/15/2020	KEMCO Energy saving loan
KEB Bank	Novelis Korea Limited	KRW	140,000,000		9/15/2020	KEMCO Energy saving loan
KEB Bank	Novelis Korea Limited	KRW	490,000,000		9/15/2020	KEMCO Energy saving loan
Shinhan Bank	Novelis Korea Limited	KRW	50,000,000,000		5/17/2019	Committed Line
NH Bank	Novelis Korea Limited	KRW	40,000,000,000		3/31/2019	Committed Line
KDB Bank	Novelis Korea Limited	KRW	30,000,000,000		5/17/2019	Committed Line
Deutsche Bank (China) Co., Ltd.	Novelis (China) Aluminum Products Co. Ltd.	RMB	200,000,000		9/16/2019	Committed Line
Bank of China	Novelis (China) Aluminum Products Co. Ltd.	RMB	100,000,000		7/24/2019	Revolving Loan Facility
ICBC	Novelis (China) Aluminum Products Co. Ltd.	RMB	100,000,000		8/30/2019	Revolving Loan Facility

EUROPE						
Listex	Novelis Switzerland SA	CHF	527,577		12/2026	crash tower and baby casting module
Dell	Novelis Switzerland SA	CHF	2,833		12/2018	Computers
Cisco	Novelis Deutschland GmbH	EUR	369,000		9/2020	LAN upgrade
Apetito	Novelis Deutschland GmbH	EUR	6,000			Equipment for the canteen
Portigon AG	Guarantee by Novelis Deutschland GmbH of debt of Aluminum Norf GmbH	EUR	432,593.82			Guarantee for Norf loan
SOUTH AMERICA						
Banco do Brasil	Novelis do Brazil Ltda.	BRL	204,976	9/21/2012	4/15/2020	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	198,282	7/30/2012	4/16/2020	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	32,609	7/6/2012	9/16/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	38,549	5/16/2012	9/16/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	46,697	5/23/2012	11/18/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	69,033	2/1/2012	12/17/2018	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	69,033	10/19/2011	12/17/2018	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	69,033	8/12/2011	12/17/2018	BNDES Loans

Banco do Brasil	Novelis do Brazil Ltda.	BRL	34,257	4/25/2012	12/17/2018	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	356,667	5/13/2011	3/15/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	218,600	8/12/2011	3/15/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	575,267	10/24/2011	3/15/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	575,267	3/31/2012	3/15/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	16,026	4/12/2012	3/15/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	54,542	4/11/2012	2/17/2020	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	36,679	2/16/2012	9/16/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	21,406	4/19/2012	9/16/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	95,504	3/23/2012	9/16/2019	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	3,500	4/8/2011	12/17/2018	BNDES Loans
Banco do Brasil	Novelis do Brazil Ltda.	BRL	26,818	4/20/2012	11/18/2019	BNDES Loans
Banco Itaú	Novelis do Brazil Ltda.	BRL	119,139	2/7/2012	4/15/2021	BNDES Loans
Banco Itaú	Novelis do Brazil Ltda.	BRL	322,917	10/10/2011	4/15/2021	BNDES Loans

Banco Itaú	Novelis do Brazil Ltda.	BRL	175,924	7/26/2011	4/15/2021	BNDES Loans
Banco Santander	Novelis do Brazil Ltda.	USD	50,000,000*			ACC Loans
Banco Safra	Novelis do Brazil Ltda.	USD	50,000,000*			ACC Loan
Banco Itaú	Novelis do Brazil Ltda.	USD	20,000,000*			Finimp Loans
Deutsche Bank S/A	Novelis do Brazil Ltda.	USD	30,000,000*			Finimp Loans

* Denotes the maximum aggregate amount that can be borrowed from time to time Schedule 6.02(c).

Existing Liens

[Subject to Skadden's ongoing review of lien search results]

(a) UCC

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Alcan Primary Products Corporation	District of Columbia Recorder of Deeds	2009011717 2-06-09	UCC-1	A consignment stock of approximately 1.3 million pounds of Alcan Aluminum Sheet ingot consisting of alloy AA 3003 in cross sections of 28 in. x 53 in. and 28 in. x 64.5 in. and alloy X528 in cross sections of 28 in. x 53 in. and 28 in. x 58 in. (the "Stock"), maintained at the warehouse of Consignee located at Oswego, New York. Title to the Stock shall be vested in Consignor until withdrawn by Consignee from consignment.	
Novelis Inc.	CSI Leasing, Inc.	District of Columbia Recorder of Deeds	2012098064 9-13-12	UCC-1	Specific Leased Equipment, leased pursuant to schedule 1 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. Equipment Location: 1950 Vaughn Road, Kennesaw, Georgia	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	CSI Leasing, Inc.	District of Columbia Recorder of Deeds	2012132119 12-7-12	UCC-3 Amendment		Amendment of #2012098064 Amending the Collateral
	CSI Leasing, Inc.	District of Columbia Recorder of Deeds	2012132207 12-7-12	UCC-3 Assignment		Assignment of #2012098064; Assigned to SunTrust Equipment Finance & Leasing Corp.
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court	0072012023849 9-12-12	UCC-1	Specific leased equipment, software and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 1 to Master Lease 275857, between the parties. Equipment located at	

	CSI Leasing, Inc.	Barrow County Clerk of Superior Court	007-2012-031088 12-7-12	UCC-3 Amendment		Amendment of #0072012023849; Specifies Collateral with document numbers
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court	007-2012-031276 12-11-12	UCC-3 Assignment		Assignment of #0072012023849; Assigned to SunTrust Equipment Finance & Leasing Corp.

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2013-030784 1-22-13	UCC-1	Various equipment, software and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule No. 2 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. Equipment location: 3560 Lenox Road, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2014-015228 5-28-14	UCC-3 Amendment		Amendment of File 007-2013030784; Amends to specify collateral and serial numbers
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2014-015342 5-29-14	UCC-3 Assignment		Assignment of File 007-2013090784; Assigned to SunTrust Equipment Finance & Leasing Corp.

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2014-002314 1-27-14	UCC-1	Various equipment, software and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule No. 3 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. Equipment location: 3560 Lenox Road, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2014-023688 8-13-14	UCC-3 Assignment		Assignment of File 007-2014002314 Assigned to SunTrust Equipment Finance & Leasing Corp.

	CSI Leasing, Inc.	Barrow County Clerk of Superior Court Georgia	007-2014-023663 8-13-14	UCC-3 Amendment		Amendment of File 007-2014002314 Amends to specify collateral and serial numbers
--	-------------------	---	--------------------------------	------------------------	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SunTrust Equipment Finance & Leasing Corp.	Barrow County Clerk of Superior Court Georgia	0072014016571 6-8-14	UCC-1	Leased equipment together with all replacements, substitutions and alternatives therefore and thereof and accessions thereto. All proceeds of all insurance policies, thereof (but without power of sale) and Equipment Schedule No. 002 under that certain Master Lease Agreement No. 275857 dated September 10, 2012, between Novelis Inc., as lessee, and CSI Leasing, Inc. as lessor	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Cisco Systems Capital Corporation	Barrow County Clerk of Superior Court Georgia	007-2014-019407 7-1-14	UCC-1	All of the Debtor's rights, title and interest, now existing and hereafter arising, in and to the following property, wherever located: (i) all Equipment from time to time between debtor as lessee and Secured Party as lessor and any and all Schedules from time to time interest into or prepared in connection with any Master Agreement, (ii) all insurance warranty, rental and other claims and rights to payment and chattel paper arising out of such Equipment, and (iii) all books records and proceeds relating to the foregoing. Equipment shall be defined as routers, router components, other computer networking and telecommunications equipment and other equipment, manufactured b Cisco Systems, Inc., its affiliates and others, together with all software and software license rights relating to the foregoing, and all substitutions, replacements, upgrades, repairs, parts and attachments, improvements and accessions thereto.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SunTrust Equipment Finance & Leasing Crop.	Barrow County Clerk of Superior Court Georgia	0072014024326 8-19-14	UCC-1	Leased equipment together with all replacements, substitutions and alternatives therefore and thereof and accessions thereto. All proceeds of all insurance policies, thereof (but without power of sale) and Equipment Schedule No. 003 under that certain Master Lease Agreement No.	

					275857 dated September 10, 2012, between Novelis Inc., as lessee, and CSI Leasing, Inc. as lessor	
Novelis Inc.	SunTrust Equipment Finance & Leasing Corp.	Barrow County Clerk of Superior Court, Georgia	0072014024328/6 (difficult to decipher whether last digit is an '8' or '6') 08/19/2014	UCC-1	The equipment more fully described on the attached, together with all replacements, substitutions and alternatives therefore and thereof and accessions thereto. All proceeds (cash and non-cash), including the proceeds of all insurance policies, thereof (but without power of sale) and Equipment Schedule No. 003 under that certain Master Lease Agreement No. 275857 dated Sept 10, 2012, between Novelis Inc. as lessee, and CSI Leasing, Inc as lessor.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-027057 09/16/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 4 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-031970 11/05/2014	UCC-3 Amendment	See attached Exhibit "A" for a listing of equipment, software, and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 4 to Master Lease No. 275857.	Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-032028 11/06/2014	UCC-3 Assignment		Assignment of file number 0072014-027057 from CSI Leasing, Inc. to SunTrust Equipment Finance & Leasing Corp.
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-027166 09/16/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 5 to Master Lease 275857, between the parties. Lessor intends that the	

					collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road, Atlanta, Georgia 30326	
--	--	--	--	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-001641 01/22/2015	UCC-3 Amendment	See attached Exhibit "A" for listing of equipment, software, and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 5 to Master Lease No. 275857.	Collateral Description Change regarding added Exhibit A
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-001811 01/23/2015	UCC-3 Assignment		Assignment of file number 0072014-027166 from CSI Leasing, Inc. to SunTrust Equipment Finance & Leasing Corp.

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-030901 10/23/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 6 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-002630 02/03/2015	UCC-3 Amendment	See attached Exhibit "A" for listing of equipment, software, and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 6 to Master Lease No. 275857.	Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of	Description of Collateral	Disposition
--------	---------------	----------------------	-------------------------	---------	---------------------------	-------------

				UCC		
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-002731 02/04/2015	UCC-3 Assignment		Assignment of file number 0072014-030901 from CSI Leasing, Inc. to SunTrust Equipment Finance & Leasing Corp.
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-031539 10/31/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 7 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta, Georgia 30326	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SunTrust Equipment Finance & Leasing Corp.	Barrow County Clerk of Superior Court, Georgia	0072014033072 11/19/2014	UCC-1	The equipment more fully described on the attached, together with all replacements, substitutions and alternatives therefore and thereof and accessions thereto. All proceeds (cash and non-cash), including the proceeds of all insurance policies, thereof (but without power of sale) and Equipment Schedule No. 003 under that certain Master Lease Agreement No. 275857 dated Sept 10, 2012, between Novelis Inc. as lessee, and CSI Leasing, Inc as lessor.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-034609 12/10/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 9 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta,	

				Georgia 30326	
--	--	--	--	---------------	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2014-034818 12/12/2014	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 8 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-008894 04/07/2015	UCC-3 Termination		Termination of file number 0072014-034818

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SunTrust Equipment Finance & Leasing Corp.	Barrow County Clerk of Superior Court, Georgia	0072015002391 01/30/2015	UCC-1	The equipment more fully described on the attached, together with all replacements, substitutions and alternatives therefore and thereof and accessions thereto. All proceeds (cash and non-cash), including the proceeds of all insurance policies, thereof (but without power of sale) and Equipment Schedule No. 005 under that certain Master Lease Agreement No. 275857 dated Sept 10, 2012, between Novelis Inc. as lessee, and CSI Leasing, Inc as lessor.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-006253	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 10 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560	

					Lenox Road NE, Suite 200, Atlanta, Georgia 30326	
--	--	--	--	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SG EQUIPMENT FINANCE USA CORP.	Barrow County Clerk of Superior Court, Georgia	007-2015-039836 12/15/2015	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 13 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta, Georgia 30326	
	SG EQUIPMENT FINANCE USA CORP.	Barrow County Clerk of Superior Court, Georgia	007-2016-016709 5/9/2016	UCC-3 Amendment		
	SG EQUIPMENT FINANCE USA CORP.	Barrow County Clerk of Superior Court, Georgia	007-20160166846 5/9/2016	UCC-3 Assignment		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2015-028617 08/31/2015	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 12 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta, Georgia 30326	
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2016-003451 08/31/2015	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2016-003537 02/05/2016	UCC-3 Assignment		Assignment of file number 0072015-028617 from CSI Leasing, Inc. to SG Equipment Finance USA Corp.

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of	Description of Collateral	Disposition
--------	---------------	----------------------	-------------------------	---------	---------------------------	-------------

				UCC		
Novelis Inc.	CSI Leasing, Inc.	Barrow County Clerk of Superior Court, Georgia	007-2016-007506 03/11/2016	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, and replacements) leased to Lessee pursuant to Equipment Schedule No. 14 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road NE, Suite 200, Atlanta, Georgia 30326	
		Barrow County Clerk of Superior Court, Georgia	007-2016-033595	UCC-3 Amendment		Collateral change to Exhibit A
		Barrow County Clerk of Superior Court, Georgia	007-2016-033812	UCC-3 Assignment		Assignment to SG Equipment Finance USA Corp.

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI LEASING CANADA LTD.	Barrow County Clerk of Superior Court, Georgia	007-2016-014525 4/25/2016	UCC-1	Various equipment software and personal property (together with all repairs, accessories and replacements) leased to Lessee pursuant to Equipment Schedule 1 to Master Lease 300333 between the parties.	
		Barrow County Clerk of Superior Court, Georgia	007-2016-016891 5/9/2016	UCC-3 Amendment		Collateral amendment
Novelis Inc.	CSI LEASING, INC.	Barrow County Clerk of Superior Court, Georgia	007-2016-023151 6/17/2016	UCC-1	Various equipment software and personal property (together with all repairs, accessories and replacements) leased to Lessee pursuant to Equipment Schedule 1 to Master Lease 275857 between the parties.	Specified equipment
		Barrow County Clerk of Superior Court, Georgia	007-2016-026865 7/13/2016	UCC-3 Amendment		Collateral amendment
Novelis Inc.	CSI LEASING, INC.	Barrow County Clerk of Superior Court, Georgia	007-2016-036549 9/23/2016	UCC-1	Various equipment software and personal property (together with all repairs, accessories and replacements) leased to Lessee pursuant to Equipment Schedule 1 to Master Lease 300333 between the parties.	Specified equipment

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	CSI LEASING CANADA LTD.	Barrow County Clerk of Superior Court, Georgia	007-2016-036558 9/23/2016	UCC-1		Specified equipment
Novelis Corporation	Cisco Systems Capital Corporation	Barrow County Clerk of Superior Court	0072012019002 7-24-12	UCC-1	All of the Debtor's right, title and interest, now existing and hereafter arising, in and to the following property, wherever located (i) all	

					Equipment from time to time subject to that Global Master Terms and Conditions ("Global Master Agreement") No. 8959 dated November 30, 2011 between Debtor as lessee and Secured Party as lessor and any and all Schedules from time to time entered into under such Global Master Agreement (ii) all insurance, warranty, rental and other claims and rights to payment and chattel paper arising out of such Equipment, and (iii) all books, components, other computer networking and telecommunications equipment and other equipment, manufactured by Cisco Systems, Inc., its affiliates and others, together with all software and software license rights relating to the foregoing, and all substitutions replacements, upgrades, repairs, parts and attachments, improvements and accessions thereto.	
--	--	--	--	--	---	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Cisco Systems Capital Corporation	Barrow County Clerk of Superior Court	007-2012-031276 12-11-12	UCC-3 Assignment		Assignment of #0072012019002; Assigned to SunTrust Equipment Finance & Leasing Corp.
Novelis Corporation	Applied Industrial Technologies, Inc.	Fulton County, Georgia Clerk of Superior Court	0602014-09500	UCC-1	Purchase Money Security Interest in and to all Consignee's now held or hereafter acquired equipment consigned or shipped to Consignee by or on behalf of Consignor pursuant to that certain Consignment Agreement between the parties. And as amended from time to time, whether manufactured by Consignor or others and under any products names, including all additions and accessions thereto and substitutions therefor and products thereof. Equipment located at address referenced above.	
Novelis Corporation	Air Liquide Industrial U.S. LP	Texas Secretary of State	09-0002194005 1/23/09	UCC-1	13,000 Gallon Nitrogen Vessel — Serial #13354 3,000 Gallon Argon Vessel — Serial #77-134-4	
	Air Liquide Industrial U.S. LP	Texas Secretary of State	14-00017720 1/17/14	UCC-3 Continuation		Continuation of File 09-0002194005;
Novelis Corporation	Air Liquide Industrial U.S. LP	Texas Secretary of State	09-0003755231 2/09/09	UCC-1	1500 Gal Lin Vessel (Serial #4677)	
	Air Liquide Industrial U.S. LP	Texas Secretary of State	14-00033580 2/2/14	UCC-3 Continuation		Continuation of File 09-0003755231

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Glencore Ltd.	Texas Secretary of	10-0007215046 3/12/10	UCC-1	All of Glencore Ltd.'s primary aluminum product delivered	

		State			from time to time to Debtor pursuant to a Master Bailment Agreement, dated January 1, 2010, and stored at storage facilities owned by Debtor.	
	Glencore Ltd.	Texas Secretary of State	15-00069781 03/04/2015	UCC-3 Continuation		
Novelis Corporation	Bank of America, N.A., as Collateral Agent (ABL)	Texas Secretary of State	10-0036218223 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights	
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	13-00151098 5/13/13	UCC-3 Assignment		Assignment of File 10-0036218223; Assigned to Wells Fargo Bank, National Association, as Collateral Agent
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	14-00388058 12/09/2014	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	14-00397501 12/18/2014	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00225598 07/16/15	UCC-3 Continuation		
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00315956 09/30/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00391831 12/11/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00086696 03/17/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00277237 08/23/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111869 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A.
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111898 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A.
	Wells Fargo Bank, National Association	Texas Secretary of State	18-00322908 09/12/18	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A.
Novelis Corporation	Wells Fargo Bank, National Association, as	Texas Secretary of State	13-0015109464 5/13/13	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as	Texas Secretary of State	14-00388053 12/09/14	UCC-3 Amendment		Collateral Description Change regarding added

	Collateral Agent					Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	14-00397498 12/18/14	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00315953 09/30/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00391833 12/11/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00086695 03/17/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00277236 08/23/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111878 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111873 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00401943 11/22/17	UCC-3 Continuation		
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	18-00322912	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Hunter Douglas Metals, Inc.	Texas Secretary of State	13-0033497050 10/21/13	UCC-1	Aluminum used beverage containers (UBC's), all as delivered to or in the possession of Debtor, now or at any future time or from time to time, at Debtor's premises or facilities (including third party warehouses, facilities or premises), or in transit, wherever located, whether or not commingled with any other aluminum or metals of Debtor or any other person, and including, without limitation, any proceeds or any of the foregoing, all as described more fully in a certain Consignment Agreement dated October 1, 2013, between Debtor and Secured Party.	
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	13-0037661774 11/26/13	UCC-1	All aluminum used beverage containers stored on behalf of Secured Party by Debtor from time to time at Debtor's facilities located at	

					302 Mayde Road, Berea, Kentucky, and/or at the warehouse of T, C & G Enterprises located at 105 Hi-Lane Drive, Richmond, Kentucky, pursuant to and as described more fully in that certain Consignment Agreement dated November 26, 2013 between Debtor and Secured Party	
--	--	--	--	--	---	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Cisco Systems Capital Corporation	Texas Secretary of State	14-0008169574 3/17/14	UCC-1	all of the Debtor's rights, title and interest, now existing and hereafter arising, in and to the following property, wherever located: (i) all Equipment from time to time between debtor as lessee and Secured Party as lessor and any and all Schedules from time to time entered into or prepared in connection with any Master Agreement, (ii) all insurance warranty, rental and other claims and rights to payment and chattel paper arising out of such Equipment, and (iii) all books records and proceeds relating to the foregoing. Equipment shall be defined as routers, router components, other computer networking and telecommunications equipment and other equipment, manufactured b[y] Cisco Systems, Inc., its affiliates and others, together with all software and software license rights relating to the foregoing, and all substitutions, replacements, upgrades, repairs, parts and attachments, improvements and accessions thereto.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	14-0017489892 6/2/14	UCC-1	All aluminum used beverage containers stored on behalf of Secured Party by Debtor from time to time at Debtor's facilities located at 302 Mayde Road, Berea, Kentucky, and/or at the warehouse of T, C & G Enterprises located at 105 Hi-Lane Drive, Richmond, Kentucky, pursuant to and as described more fully in that certain Consignment Agreement dated June 2, 2014, between Debtor and Secured Party	
Novelis Corporation	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	14-0031874008 10/06/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral	Texas Secretary of State	14-00388060 12/09/2014	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

	Agent					
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	14-00397499 12/18/2014	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00315965 09/30/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	15-00391834 12/11/15	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00086697 03/17/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-00277243 08/23/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111876 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-00111899 04/03/17	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	18-00322914 09/12/2018	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
Novelis Corporation	Barclays Bank PLC, as Receivables Agent on behalf of the Buyers	Texas Secretary of State	14-0039021939 12/11/14	UCC-1	Collateral set forth on Exhibit A	
	Barclays Bank PLC, as Receivables Agent on behalf of the Buyers	Texas Secretary of State	16-00278957 08/24/16	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Trafigura AG	Texas Secretary of State	14-0039436444 12/17/14	UCC-1	The following products at the Debtor's manufacturing facilities located at 1261 Willow Run Road, Greensboro, Georgia 30642; 1120 Industrial Blvd., Greensboro, GA 30642; and 305 East Seneca Street, Oswego, NY 13126 (the "Facilities"): aluminum scrap of various sized delivered by Secured Party to the Debtor at the Facilities.	
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	15-0015092386 05/14/15	UCC-1	All aluminum used beverage containers stored on behalf of Secured Party by Debtor from time to time at Debtor's facilities located at 302 Mayde Road, Berea, Kentucky, and/or at the warehouse of	

					T, C & G Enterprises located at 105 Hi-Lane Drive, Richmond, Kentucky, pursuant to and as described more fully in that certain Consignment Agreement dated May 1, 2015 between Debtor and Secured Party	
--	--	--	--	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	15-0020275789 06/26/15	UCC-1	All aluminum used beverage containers stored on behalf of Secured Party by Debtor from time to time at Debtor's facilities located at 302 Mayde Road, Berea, Kentucky, and/or at the warehouse of 1) T, C & G Enterprises located at 105 Hi-Lane Drive, Richmond, Kentucky, 2) Port City Logistics, Inc., located at 305 East Seneca Street, Oswego, NY 13126, 3) Scepter, Inc. located at 1485 Scepter Lane, Waverly, TN 37185 and 4) Scepter New York, Inc. located at 11 Lamb Road, Seneca Falls, NY 13148 pursuant to and as described more fully in that certain Consignment Agreement dated June 25, 2015, between Debtor and Secured Party	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	15-0028546728 09/03/15	UCC-1	All aluminum used beverage containers stored on behalf of Secured Party by Debtor from time to time at Debtor's facilities located at 302 Mayde Road, Berea, Kentucky, and/or at the warehouse of 1) Novelis Greensboro Plant, located at 1261 Willow Run Road, Greensboro, GA 30642 and 2) Novelis Oswego Works Plant, located at 448 County route 1A, Oswego, NY 13126-0028 pursuant to and as described more fully in that certain Consignment Agreement dated June 25, 2015, between Debtor and Secured Party	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	16-0010917883 04/06/16	UCC-1	The equipment described below and all equipment parts, accessories, substitutions, additions, accessions and replacements thereto and thereof and the proceeds	

					thereof, together with all installment payments, insurance proceeds, other proceeds and payments due and to become due arising from or relating to said equipment. Financing statement is filed for notice purposes only and the filing thereof shall not be deemed evidence of any intention to create a security interest under the UCC. 1-Hyster Forklift H100FT sn U005V02789P	
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	16-0015087715 5/10/16	UCC-1	Certain equipment including a Linde H70D Forklift	
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	16-0024157379 7/22/16	UCC-1	Certain equipment including a Linde HT140/600 Forklift Truck	
Novelis Corporation	Standard Chartered Trade Services Corporation	Texas Secretary of State	16-0031911365 9/26/16	UCC-1	Aluminum scrap and sheet ingot at certain warehouses pursuant to Consignment Agreement dated June 25, 2015.	
Novelis Corporation	Standard Chartered Bank, as Collateral Agent	Texas Secretary of State	17-0001709277 1/13/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Standard Chartered Bank, as Collateral Agent	Texas Secretary of State	18-00322916 09/12/18	UCC-3 Amendment		Collateral Description Change regarding added Exhibit A
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	17-0015710052 05/08/17	UCC-1	The equipment described below and all equipment parts, accessories, substitutions, additions, accessions and replacements thereto and thereof and the proceeds thereof, together with all installment payments, insurance proceeds, other proceeds and payments due and to become due arising from or relating to said equipment. This financing statement is filed for notice purposes only and the filing thereof shall not be deemed evidence of any intention to create a security interest under the UCC. 1 New 2016 Powerboss SW9XKDSL Sweeper Armadillo 9X S/N 17PB1039	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	17-0016823917 05/16/17	UCC-1	The equipment described below and all equipment parts, accessories, substitutions, additions, accessions and replacements thereto and thereof and the proceeds thereof, together with all installment payments, insurance proceeds, other proceeds and payments due and to become due arising from or relating to said equipment. This financing statement is filed for notice purposes only and the filing thereof shall not be deemed	

					evidence of any intention to create a security interest under the UCC. 2 – Linde H90D Forklifts S/N's: H2X396H00162, H2X396H00222	
Novelis Corporation	Wells Fargo Bank, National Association, as Collateral Agent	Texas Secretary of State	17-0031369040 09/14/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	17-0031413353 09/15/17	UCC-1	The equipment described below and all equipment parts, accessories, substitutions, additions, accessions and replacements thereto and thereof and the proceeds thereof, together with all installment payments, insurance proceeds, other proceeds and payments due and to become due arising from or relating to said equipment. This financing statement is filed for notice purposes only and the filing thereof shall not be deemed evidence of any intention to create a security interest under the UCC. 2 New 2017 Hyster H110FT Forklifts S/N U — 5V04569R, U005V04571R.	
Novelis Corporation	Wells Fargo Bank, N.A.	Texas Secretary of State	18-0006172449 02/23/18	UCC-1	All of the equipment now or hereafter leased by lessor to Lessee; and all accessions, additions, replacements, and substitutions thereto and therefore; and all proceeds including insurance proceeds therefore.	
Novelis PAE Corporation	Bank of America, N.A., as Collateral Agent	Delaware Secretary of State	20104502989 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20131816074 05/13/13	UCC-3 Assignment		Assignment of #20104502989; assigned to Wells Fargo Bank, National Association, as Collateral Agent
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144007134 10/06/14	UCC-3 Amendment		Debtor Party Information Change regarding mailing address
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20153077772 07/16/15	UCC-3 Continuation		
Novelis Global Employment Organization, Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20156232275 12/22/15	UCC-3 Amendment		Debtor name change
Novelis PAE Corporation	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2013 1815407 5/13/13	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

	Agent					
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4006714 10/06/14	UCC-3 Amendment		Debtor Party Information Change regarding mailing ad-dress
Novelis Global Employment Organization, Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20156232291 12/22/15	UCC-3 Amendment		Debtor name change
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20177744438 11/21/17	UCC-3 Continuation		
Novelis PAE Corporation	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4006656 10/06/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Global Employment Organization, Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20156232382 12/22/15	UCC-3 Amendment		Debtor name change
Novelis Global Employment Organization, Inc.	Standard Chartered Bank, as Collateral Agent	Delaware Secretary of State	20170301637 01/13/17	UCC-1	All assets now or hereafter acquired by the debtor or in which debtor otherwise has rights	
Novelis Global Employment Organization, Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20176113010 09/14/17	UCC-1	All assets now or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis South America Holdings LLC	Bank of America, N.A., as Collateral Agent (ABL)	Delaware Secretary of State	20104503185 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Bank of America, N.A., as Collateral Agent (ABL)	Delaware Secretary of State	20131816173 5/13/13	UCC-3 Assignment		Assignment of File 2010 4503185; Assigned to Wells Fargo Bank, National Association, as Collateral Agent
	Bank of America, N.A., as Collateral Agent (ABL)	Delaware Secretary of State	20153077822 07/16/15	UCC-3		Continuation filed
Novelis South America Holdings LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20131815811 5/13/13	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144007522 10/06/14	UCC-3 Amendment		Debtor Party Information Change regarding mailing address
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20177744453 11/21/17	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis South America Holdings LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144006565 10/06/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Novelis South America Holdings LLC	Standard Chartered Bank, as Collateral Agent	Delaware Secretary of State	20170301769 01/13/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis South America Holdings LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20176112970 09/14/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Acquisitions LLC	Bank of America, NA., as Collateral Agent	Delaware Secretary of State	2010 4503417 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		Delaware Secretary of State	2013 1816264 5/13/14	UCC-3 Assignment		Assignment of File 2010 4503417 to Wells Fargo Bank; National Association, as Collateral Agent
		Delaware Secretary of State	2015 3077798 07/16/15	UCC-3 Continuation		
Novelis Acquisitions LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2013 1815944 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4007274 10/06/14	UCC-3 Amendment	(remained the same as above)	Debtor Party Information Change regarding mailing address
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20177744388 11/21/17	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Acquisitions LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4006557 10/06/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Acquisitions LLC	Standard Chartered Bank, as Collateral Agent	Delaware Secretary of State	20170301819 01/13/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Acquisitions LLC	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20176112939 09/14/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis North America Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2013 1815993 5/13/13	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4124996 10/14/14	UCC-3 Amendment		Debtor Party Information Change regarding entity name
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20177744412 11/21/17	UCC-3 Continuation		
Novelis North America Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	2014 4006532 10/14/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis	Wells Fargo	Delaware	2014 4129094	UCC-3		Debtor Party

Holdings Inc.	Bank, National Association, as Collateral Agent	Secretary of State	10/14/14	Amendment		Information Change regarding entity name
Novelis Holdings Inc.	Standard Chartered Bank, as Collateral Agent	Delaware Secretary of State	20170301843 01/13/17	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20176112889	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Holdings Inc.	Bank of America, N.A., as Collateral Agent	Delaware Secretary of State	20104503482 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20131816280 05/13/13	UCC-3 Assignment		Assignment on File 20131816280 to Wells Fargo Bank, National Association, as Collateral Agent
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144125076 10/14/14	UCC-3 Amendment		Debtor Party Information Change regarding mailing address
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20153077806 07/16/15	UCC-3 Continuation		
Novelis Holdings Inc.	Bank of America, NA., as Collateral Agent	Delaware Secretary of State	20104503540 12/20/10	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20131816322 05/13/13	UCC-3 Assignment		Assignment on File 20131816280 to Wells Fargo Bank, National Association, as Collateral Agent
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144125142 10/14/14	UCC-3 Amendment		Debtor Party Information Change regarding mailing ad-dress
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20153077814 07/16/15	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20131815993 05/13/13	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144124996 10/14/14	UCC-3 Amendment		Debtor Party Information Change regarding entity name
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20177744412 11/21/17	UCC-3 Continuation		
Novelis Holdings Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144006532 10/06/14	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

	Agent					
	Wells Fargo Bank, National Association, as Collateral Agent	Delaware Secretary of State	20144129094 10/14/14	UCC-3 Amendment		Debtor Party Information Change regarding entity name

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Washington, D.C.						
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114716 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056598 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092086 10/07/2014	UCC-3 Amendment		Debtor name change
		District of Columbia Recorder of Deeds	2015023231 03/13/2015	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of Deeds	2015073108 07/20/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2015126216 12/14/2015	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of Deeds	2016086727 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	Collateral change
		District of Columbia Recorder of Deeds	2016133181 12/21/2016	UCC-3 Amendment		Partial Release of Collateral
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2011006235 01/13/2011	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2013056586 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2015081389 08/10/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2016101325 10/03/2016	UCC-3 Amendment		Deleted collateral: “78,234,054 ordinary shares in the capital of Aluminium Company of Malaysia Berhad (Company No. 3859-U), a company duly incorporated in Malaysia.”
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055804 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of	2014092350	UCC-3		

		Columbia Recorder of Deeds	10/08/2014	Amendment		
		District of Columbia Recorder of Deeds	2016101326 10/03/2016	UCC-3 Amendment		Deleted collateral: "78,234,054 ordinary shares in the capital of Aluminium Company of Malaysia Berhad (Company No. 3859-U), a company duly incorporated in Malaysia."
		District of Columbia Recorder of Deeds	2017129527 11/22/2017	UCC-3 Continuation		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055817 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2014092341 10/08/2014	UCC-3 Amendment		
		District of Columbia Recorder of Deeds	2015023229 03/13/2015	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of Deeds	2015126217 12/14/2015	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of Deeds	2016086728 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	
		District of Columbia Recorder of Deeds	2016133182 12/21/2016	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of Deeds	2017129568 11/22/2017	UCC-3 Continuation		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092352 10/08/2014	UCC-1		
		District of Columbia Recorder of Deeds	2016101327 10/03/2016	UCC-3 Amendment		Deleted collateral: "78,234,054 ordinary shares in the capital of Aluminium Company of Malaysia Berhad (Company No. 3859-U), a company duly incorporated in Malaysia."

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092365 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2015023222 03/13/2015	UCC-3 Amendment		Partial Release of Collateral
		District of Columbia Recorder of	2015126218 12/14/2015	UCC-3 Amendment		Partial Release of Collateral

		Deeds				
		District of Columbia Recorder of Deeds	2016086729 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	
		District of Columbia Recorder of Deeds	2016133183 12/21/2016	UCC-3 Amendment		Partial Release of Collateral
Novelis Inc.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006083 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto.	
Novelis Inc.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006107 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101798 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto.	
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101813 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
4260848 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114701 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056589 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014058439 07/01/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073092 07/20/2015	UCC-3 Continuation		
4260848 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055825 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014058436 07/01/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129570 11/22/2017	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
4260848 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092373 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
4260848 Canada Inc.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006075 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor	

	Agent	Deeds			or in which debtor otherwise has rights.	
4260848 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101793 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
4260856 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114704 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056590 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014058440 07/01/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073091 07/20/2015	UCC-3 Continuation		
4260856 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055807 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014058434 07/01/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129571 07/20/2015	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
4260856 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092355 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
4260856 Canada Inc.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006093 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
4260856 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101811 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
8018227 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2011122394 12/08/2011	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056583 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014058431 07/01/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2016072082 07/18/2016	UCC-3 Continuation		
8018227 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055826 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia	2014058437 07/01/2014	UCC-3 Amendment		Debtor information update

		Recorder of Deeds				
		District of Columbia Recorder of Deeds	2018001064 01/03/2018	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
8018227 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092374 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
8018227 Canada Inc.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006074 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
8018227 Canada Inc.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101792 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Europe Holdings Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114706 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056592 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092081 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073109 07/20/2015	UCC-3 Continuation		
Novelis Europe Holdings Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055810 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092348 10/08/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129561 11/22/2017	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Europe Holdings Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092358 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Europe Holdings Limited	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006092 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Europe Holdings Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101810 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Services Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114709 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia	2013056594	UCC-3 Assignment		Assigned to current Secured Party

		Recorder of Deeds	05/15/2013			
		District of Columbia Recorder of Deeds	2014092078 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073126 07/20/2015	UCC-3 Continuation		
Novelis Services Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055812 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092346 10/08/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129531 11/22/2017	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Services Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092360 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Services Limited	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006090 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Services Limited	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101803 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis UK Ltd	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114707 12/28/2010	UCC-1		
		District of Columbia Recorder of Deeds	2013056593 05/15/2013	UCC-3 Assignment		
		District of Columbia Recorder of Deeds	2014092074 10/07/2014	UCC-3 Amendment		
		District of Columbia Recorder of Deeds	2015073115 07/20/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2015126169 12/14/2015	UCC-3 Amendment		
Novelis UK Ltd	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055811 05/14/2013	UCC-1		
		District of Columbia Recorder of Deeds	2014092347 10/08/2014	UCC-3 Amendment		
		District of Columbia Recorder of Deeds	2015126170 12/14/2015	UCC-3 Amendment		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of	Description of Collateral	Disposition
--------	---------------	----------------------	-------------------------	---------	---------------------------	-------------

				UCC		
		District of Columbia Recorder of Deeds	2017130134 11/27/2017	UCC-3 Continuation		
Novelis UK Ltd	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092359 10/09/2014	UCC-1		
		District of Columbia Recorder of Deeds	2015126171 12/14/2015	UCC-3 Amendment		
Novelis UK Ltd	Barclays Bank PLC, as Receivables Agent on Behalf of the Buyers	District of Columbia Recorder of Deeds	2015125585 12/11/2015	UCC-1		
		District of Columbia Recorder of Deeds	2016086668 08/24/2016	UCC-3 Amendment		Collateral Change (Collateral Exhibit A in pages 10-11/24 of Novelis UK Ltd. search results)
Novelis UK Ltd	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006091 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Collateral Exhibit A in pages 13-15/24 of Novelis UK Ltd. search results
Novelis UK Ltd	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101809 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Collateral Exhibit A in pages 17-19/24 of Novelis UK Ltd. search results
Novelis AG	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114714 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2013056596 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092087 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015023230 03/13/2015	UCC-3 Amendment		Collateral Change (Exhibit A in pages 2930/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2015073089 07/20/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2015126163 12/14/2015	UCC-3 Amendment		Collateral Change (Exhibit A in pages 3334/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2016086732 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	Collateral Change (Exhibit A in pages 3637/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2016133270 12/21/2016	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Change (Exhibit A in pages 3940/98 of Novelis AG search results)

Novelis AG	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055815 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092343 10/08/2014	UCC-3 Amendment		Debtor information update

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2015023227 03/13/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 44-45/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2015126164 12/14/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 47-48/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2016086733 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 50-51/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2016133269 12/21/2016	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 53-54/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2017129574 11/22/2017	UCC-3 Continuation		
Novelis AG	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092363 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2015023224 03/13/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 58-59/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2015126165 12/14/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 61-62/98 of Novelis AG search results)

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2016086734 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in pages 64-65/98 of Novelis AG search results)
		District of Columbia Recorder of Deeds	2016133268 12/21/2016	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral change (Exhibit A in page 67/98 of Novelis AG search results)
Novelis AG	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006085 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Collateral Exhibit A in pages 89-90/98 of Novelis AG search results)
Novelis AG	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101800 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Collateral Exhibit A in pages 92-93/98 of Novelis AG search results)
Novelis Switzerland SA	Wells Fargo Bank, National Association, as Collateral	District of Columbia Recorder of Deeds	2010114717 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

	Agent					
		District of Columbia Recorder of Deeds	2013056599 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092075 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073119 07/20/2015	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Switzerland SA	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055818 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092093 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129533 11/22/2017	UCC-3 Continuation		
Novelis Switzerland SA	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092366 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Switzerland SA	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006081 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Switzerland SA	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101797 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Aluminium Holding Unlimited Company	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114727 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056605 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092084 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073088 07/20/2015	UCC-3 Continuation		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2016132322 12/20/2016	UCC-3 Amendment		Debtor information update
Novelis Aluminium Holding Unlimited Company	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055821 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092090 10/07/2014	UCC-3 Amendment		Debtor information update

		District of Columbia Recorder of Deeds	2016132320 12/20/2016	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129558 11/22/2017	UCC-3 Continuation		
Novelis Aluminium Holding Unlimited Company	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092369 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2016132321 12/20/2016	UCC-3 Amendment		Debtor information update
Novelis Aluminium Holding Unlimited Company	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006078 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Aluminium Holding Unlimited Company	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101796 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Sheet Ingot GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2012085409 08/09/2012	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2013056585 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092351 10/08/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017028569 03/15/2017	UCC-3 Continuation		
Novelis Sheet Ingot GmbH	Bank of America, N.A., as Collateral Agent	District of Columbia Recorder of Deeds	2012085410 08/09/2012	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092059 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015057930 06/10/2015	UCC-3 Amendment		Secured Party information update
		District of Columbia Recorder of Deeds	2017006856 01/18/2017	UCC-3 Termination		
		District of Columbia Recorder of Deeds	2017028893 03/15/2017	UCC-3 Continuation		
Novelis Sheet Ingot GmbH	Bank of America, N.A., as Collateral Agent	District of Columbia Recorder of Deeds	2013055814 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092344 10/08/2014	UCC-3 Amendment		Debtor information update
		District of Columbia	2017129532 03/15/2017	UCC-3 Continuation		

		Recorder of Deeds				
--	--	-------------------	--	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Sheet Ingot GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092362 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Sheet Ingot GmbH	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006086 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Sheet Ingot GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101801 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Deutschland GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101802 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Collateral Exhibit A in pages 5-7/149 of Novelis Deutschland GmbH search results
Novelis Deutschland GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017129559 11/22/2017	UCC-3 Continuation		
Novelis Deutschland GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114711 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056595 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092053 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015023233 03/13/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 44-46/149 of Novelis Deutschland GmbH search results

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2015073078 07/20/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2015126175 12/14/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 49-51/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016086750 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, except for the assets described in Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 53-55/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016133198 12/21/2016	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 57-59/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2017063522 06/09/2017	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 61-62/149 of Novelis Deutschland GmbH search results
Novelis Deutschland GmbH	Wells Fargo Bank, National Association, as Collateral	District of Columbia Recorder of Deeds	2013055813 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets	Collateral Exhibit A in pages 5-7/149 of Novelis Deutschland GmbH search

	Agent				listed on Exhibit A attached hereto.	results
		District of Columbia Recorder of Deeds	2014092345 10/08/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015023226 03/13/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 66-68/149 of Novelis Deutschland GmbH search results

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2015126176 12/14/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 70-72/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016086751 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Exhibit A in pages 74-76/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016133199 12/21/2016	UCC-3 Amendment	See Exhibit attached hereto, which is made a part hereof.	Exhibit A in pages 78-80/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2017063523 06/09/2017	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 82-83/149 of Novelis Deutschland GmbH search results
Novelis Deutschland GmbH	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092361 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2015023225 03/13/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 86-88/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2015126177 12/14/2015	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 90-92/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016086752 08/24/2016	UCC-3 Amendment	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Exhibit A in pages 94-96/149 of Novelis Deutschland GmbH search results

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2016133200 12/21/2016	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 98100/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2017063521 06/09/2017	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Exhibit A in pages 102103/149 of Novelis Deutschland GmbH search results
Novelis Deutschland GmbH	Barclays Bank PLC, as Receivables Agent on behalf of the Buyers	District of Columbia Recorder of Deeds	2015022493 03/12/2015	UCC-1	For a description of the collateral covered by this financing statement, please see Exhibit A attached hereto, which is incorporated herein by reference.	Collateral Exhibit A in pages 105106/149 of Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2016086667 08/24/2016	UCC-3 Amendment	For a description of the collateral covered by this financing statement, please see Exhibit A attached hereto, which is incorporated herein by reference.	Collateral Exhibit A in pages 108110/149 of Novelis Deutschland GmbH search results
Novelis Deutschland	Standard Chartered Bank, as	District of Columbia	2017006087 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor	Collateral Exhibit A in pages 138140/149 of

GmbH	Collateral Agent	Recorder of Deeds			or in which debtor otherwise has rights, other than the assets listed on Exhibit A attached hereto.	Novelis Deutschland GmbH search results
		District of Columbia Recorder of Deeds	2017063524 06/09/2017	UCC-1	See Exhibit A attached hereto which is made a part hereof.	Collateral Exhibit A in pages 142143/149 of Novelis Deutschland GmbH search results

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis do Brasil Ltda.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2010114728 12/28/2010	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2013056606 05/15/2013	UCC-3 Assignment		Assigned to current Secured Party
		District of Columbia Recorder of Deeds	2014092082 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2015073111 07/20/2015	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2018056205 06/05/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Exhibit A in pages 16-17/44 of Novelis do Brasil Ltda. search results
Novelis do Brasil Ltda.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055822 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2014092089 10/07/2014	UCC-3 Amendment		Debtor information update
		District of Columbia Recorder of Deeds	2017129560 11/22/2017	UCC-3 Continuation		
		District of Columbia Recorder of Deeds	2018056204 06/05/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Exhibit A in pages 16-17/44 of Novelis do Brasil Ltda. search results
Novelis do Brasil Ltda.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092370 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		District of Columbia Recorder of Deeds	2018056203 06/05/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Exhibit A in pages 26-27/44 of Novelis do Brasil Ltda. search results
Novelis do Brasil Ltda.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006077 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2018056207 06/05/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Exhibit A in pages 34-35/44 of Novelis do Brasil Ltda. search results
Novelis do Brasil Ltda.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101795 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia	2018056206	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Collateral Exhibit A in pages 38-39/44 of Novelis do Brasil

		Recorder of Deeds	06/05/2018			Ltda. search results
Novelis PAE SAS	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2013055827 05/14/2013	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2017129530 11/22/2017	UCC-3 Continuation		
Novelis PAE SAS	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092375 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis PAE SAS	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006073 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis PAE SAS	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101791 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis MEA Ltd.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2014092376 10/08/2014	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2018003670 01/10/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Debtor information update
Novelis MEA Ltd.	Standard Chartered Bank, as Collateral Agent	District of Columbia Recorder of Deeds	2017006072 01/17/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2018003667 01/10/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Debtor information update
Novelis MEA Ltd.	Wells Fargo Bank, National Association, as Collateral Agent	District of Columbia Recorder of Deeds	2017101790 09/14/2017	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
		District of Columbia Recorder of Deeds	2018003669 01/10/2018	UCC-3 Amendment	See Exhibit A attached hereto, which is made a part hereof.	Debtor information update

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Georgia						
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2017-051956 12/13/2017	UCC-1	Various equipment, software, end personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 25US to Master Lease 300333, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with en	

					equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3580 Lenox Road, Atlanta, Georgia 30326	
		Georgia Cooperative Authority (Barrow County)	007-2018-032691 07/17/2018	UCC-3 Assignment (original file # 007-2017- 051956)		Assignment to Current Secured Party
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2012-023849 09/12/2012	UCC-1		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2012-031088 12/07/2012	UCC-3 Amendment (original file # 007-2012- 023849)		
		Georgia Cooperative Authority (Barrow County)	007-2012-031276 12/11/2012	UCC-3 Assignment (original file # 007-2012- 023849)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2013-030784 10/22/2013	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2014-015228 05/28/2014	UCC-3 Amendment (original file # 007-2013- 030784)		
		Georgia Cooperative Authority (Barrow County)	007-2014-015342 05/29/2014	UCC-3 Assignment (original file # 007-2013- 030784)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-002314 01/27/2014	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2014-023663 08/13/2014	UCC-3 Amendment (original file # 007-2014- 002314)		
		Georgia Cooperative Authority (Barrow County)	007-2014-023688 08/13/2014	UCC-3 Assignment (original file # 007-2014- 002314)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-016571 06/09/2014	UCC-1		
Novelis Inc.	Cisco Systems Capital Corporation	Georgia Cooperative Authority (Barrow County)	007-2014-019407 07/01/2014	UCC-1		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow	007-2014-024326 08/19/2014	UCC-1		

		County)				
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-027057 09/16/2014	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2014-031970 11/05/2014	UCC-3 Amendment (original file # 007-2014- 027057)		
		Georgia Cooperative Authority (Barrow County)	007-2014-032028 11/06/2014	UCC-3 Assignment (original file # 007-2014- 027057)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-027166 09/16/2014	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2015-001641 01/22/2015	UCC-3 Amendment (original file # 007-2014- 027166)		
		Georgia Cooperative Authority (Barrow County)	007-2015-001811 01/23/2015	UCC-3 Assignment (original file # 007-2014- 027166)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-030901 10/23/2014	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2015-002630 02/03/2015	UCC-3 Amendment (original file # 007-2014- 030901)		
		Georgia Cooperative Authority (Barrow County)	007-2015-002731 02/04/2015	UCC-3 Assignment (original file # 007-2014- 030901)		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing, Inc.	Georgia Cooperative Authority (Barrow County)	007-2014-031539 10/31/2014	UCC-1		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-033072 11/19/2014	UCC-1		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2014-034609 12/10/2014	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2015-018721 06/15/2015	UCC-3 Amendment (original file # 007-2014- 034609)		
		Georgia Cooperative Authority (Barrow County)	007-2015-018785 06/15/2015	UCC-3 Assignment (original file # 007-2014- 034609)		
Novelis Inc.	CSI Leasing, Inc.	Georgia Cooperative Authority (Barrow	007-2014-034818 12/12/2014	UCC-1		

		County)				
		Georgia Cooperative Authority (Barrow County)	007-2015-008894 04/07/2015	UCC-3 Termination (original file # 007-2014- 034818)		
Novelis Inc.	Suntrust Equipment Finance & Leasing Corp.	Georgia Cooperative Authority (Barrow County)	007-2015-002391 01/30/2015	UCC-1		
Novelis Inc.	CSI Leasing, Inc.	Georgia Cooperative Authority (Barrow County)	007-2015-006253 03/13/2015	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2015-027270 08/20/2015	UCC-3 Amendment (original file # 007-2015- 006253)		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2015-027462 08/21/2015	UCC-3 Assignment (original file # 007-2015- 006253)		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2015-019584 06/19/2015	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2015-034053 10/19/2015	UCC-3 Amendment (original file # 007-2015- 019584		
		Georgia Cooperative Authority (Barrow County)	007-2015-034114 10/19/2015	UCC-3 Assignment (original file # 007-2015- 019584		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2015-028617 08/31/2015	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2016-003451 02/05/2016	UCC-3 Amendment (original file # 007-2015- 028617)		
		Georgia Cooperative Authority (Barrow County)	007-2016-003537 02/05/2016	UCC-3 Assignment (original file # 007-2015- 028617)		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2015-039836 12/15/2015	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2016-016709 05/09/2016	UCC-3 Amendment (original file # 007-2015- 039836)		
		Georgia Cooperative Authority (Barrow County)	007-2016-016846 05/09/2016	UCC-3 Assignment (original file # 007-2015- 039836)		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
--------	---------------	----------------------	-------------------------	----------------	---------------------------	-------------

Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2016-007506	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2016-033595 09/01/2016	UCC-3 Amendment (original file # 007-2016-007506)		
		Georgia Cooperative Authority (Barrow County)	007-2016-033812 09/02/2016	UCC-3 Assignment (original file # 007-2016-007506)		
Novelis Inc.	CSI Leasing Canada Ltd.	Georgia Cooperative Authority (Barrow County)	007-2016-014525 04/25/2016	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2016-016891 05/09/2016	UCC-3 Amendment (original file # 007-2016-014525)		
		Georgia Cooperative Authority (Barrow County)	007-2017-017160 04/28/2017	UCC-3 Amendment (original file # 007-2016-014525)		
		Georgia Cooperative Authority (Barrow County)	007-2017-017291 04/28/2017	UCC-3 Amendment (original file # 007-2016-014525)		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2016-023151 06/17/2016	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2016-026865 07/13/2016	UCC-3 Amendment (original file # 007-2016-023151)		
		Georgia Cooperative Authority (Barrow County)	007-2016-044085 11/28/2016	UCC-3 Amendment (original file # 007-2016-023151)		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2016-044131 11/28/2016	UCC-3 Assignment (original file # 007-2016-023151)		
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2016-036549 09/23/2016	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2017-002141 01/19/2017	UCC-3 Amendment (original file # 007-2016-036549)		
		Georgia Cooperative Authority (Barrow County)	007-2017-002413 01/20/2017	UCC-3 Assignment (original file # 007-2016-036549)		
Novelis Inc.	CSI Leasing Canada Ltd.	Georgia Cooperative Authority (Barrow County)	007-2016-036558 09/23/2016	UCC-1		

Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2016-043470 11/18/2016	UCC-1		
		Georgia Cooperative Authority (Barrow County)	007-2017-023139 06/05/2017	UCC-3 Amendment (original file # 007-2016-043470)		
		Georgia Cooperative Authority (Barrow County)	007-2017-023140 06/05/2017	UCC-3 Assignment (original file # 007-2016-043470)		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2017-008354 03/09/2017	UCC-1	See attached "Exhibit A" for a listing of equipment software and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 20 US to Master Lease No. 300333.	
		Georgia Cooperative Authority (Barrow County)	007-2017-039345 09/13/2017	UCC-3 Amendment (original file # 007-2017-008354)		
		Georgia Cooperative Authority (Barrow County)	007-2017-046166 10/31/2017	UCC-3 Amendment (original file # 007-2017-008354)		
		Georgia Cooperative Authority (Barrow County)	007-2017-034501 08/11/2017	UCC-3 Assignment (original file # 007-2017-008354)	See Exhibit A	Collateral Change to Current
		Georgia Cooperative Authority (Barrow County)	007-2017-046167 10/31/2017	UCC-3 Assignment (original file # 007-2017-008354)	This is a full assignment of Equipment Schedule No. 20US to Master Lease No. 300333.	Full Assignment to Current Secured Party
Novelis Inc.	CSI Leasing Canada Ltd.	Georgia Cooperative Authority (Barrow County)	007-2017-011560 03/28/2017	UCC-1		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2018-018036 05/04/2018	UCC-3 Amendment (original file # 007-2017-011560)	See below for a listing of equipment, software, and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 21CN to Master Lease No. 300333. Equipment Location-1 LAPPAN'S LANE, Kingston, ON K7L 4Z5 2-DELLLATITUDE 5285 C15 DC 2.6GHZ, Serial Nos. - 2RFF9H2, DBV79112 2-DELLLATITUDE 5289 C15 DC 2.6GHZ, Serial Nos. BRD6FF12, JPSYDH2 4-DELLLATITUDE 7480	Collateral Change to Current

					C15 DC 2.6GHZ, Serial Nos. - 50P14H2, FW2K4H2, 31i7F4I-12, J1YQ3H2 8-DELL- LATITUDE E7470 C15 DC 2401-1Z, Serial Nos. 543YZF2, G13YZF2, JS8YZF2, GCGYZF2, JS8YZF2, 2CCXZF2, CDGL3G2, 6GGL3G2 4-DELLOPTIPLEX 5040 C15 QC 32GHZ, Serial Nos. - 19YBKH2, 19Y9KHZ 19Z710- 12, 19YBKH2	
--	--	--	--	--	---	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2017-023566 06/06/2017	UCC-1		
		Georgia Cooperative Authority (Coweta County)	038-2017-018441 11/29/2017	UCC-3 Assignment (original file # 007-2017-023566)		Full Assignment to Current Secured Party
		Georgia Cooperative Authority (Barrow County)	007-2017-050203 11/30/2017	UCC-3 Amendment (original file # 007-2017-023566)	See attached Exhibit "A" for a listing of equipment software and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 22US to Master Lease No. 300333.	Collateral Change to Current

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	SG Equipment Finance USA Corp.	Georgia Cooperative Authority (Barrow County)	007-2017-040600 09/21/2017	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 23US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road, Atlanta, Georgia 30326	
		Georgia Cooperative Authority (Barrow)	007-2018-005755 02/19/2018	UCC-3 Assignment (original file		Full Assignment to Current Secured Party

		County)		# 007-2017-040600)		
--	--	---------	--	--------------------	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2018-005756 02/19/2018	UCC-3 Amendment (original file # 007-2017-040600)	See attached Exhibit "A" for a listing of equipment software and personal property. Amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 22US to Master Lease No. 300333.	Collateral Change to Current
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2017-042541 10/04/2017	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 24CN to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3560 Lenox Road, Atlanta, Georgia 30326	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-002517 01/22/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 26US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 180 Peachtree Street NW, Atlanta, Georgia 30303	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-009462 03/15/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions,	

					<p>accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 27US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 180 Peachtree Street NW, Atlanta, Georgia 30303</p>	
--	--	--	--	--	---	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing Canada Ltd.	Georgia Cooperative Authority (Barrow County)	007-2018-011202 03/23/2018	UCC-1	<p>See Below for a listing of equipment, software, and personal property. Amending to ADD specific collateral end serial numbers, pursuant to Equipment Schedule No. 28CN to Master Lease No 300333.</p> <p>Equipment Location - 1 LAPPANS LANE, Kingston, ON K7L 4Z5</p> <p>1-DELLLATITUDE 7390 CI5 QC 1.7GHZ, Serial No. - 1.15KSN2 10-D1aL- LATITUDE 7480 CV DC 2.8GHZ, Serial Nos. - C8MZ3M2, JHPO4M2, FIFJO4M2, HCJO4M2, FHFZ3M2, DXVO4M2, DFJO4M2, DI3J04M2, CHJO4M2, CGFZ3M2</p> <p>4-DELLLATITUDE 7490 CI ,5 QC 1.7GHZ, Serial Nos. - 7RZLSN2, DZBMSN2, CHONSN2, 995MSN2</p>	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Barrow County)	007-2019-002516 01/22/2019	UCC-3 Amendment (original file # 007-2018-011202)	<p>See Below for a listing of equipment, software, and personal property. Amending to ADD specific collateral end serial numbers, pursuant to Equipment Schedule No. 28CN to Master Lease No 300333.</p> <p>Equipment Location - 1</p>	Collateral Change to Current

					LAPPANS LANE, Kingston, ON K7L 4Z5 1-DELLATITUDE 7390 C15 QC 1.7GHZ, Serial No. - 1.15KSN2 10-D1a.L- LATITUDE 7480 CV DC 2.8GHZ, Serial Nos. - C8MZ3M2, JHPO4M2, FIFJO4M2, HCJO4M2, FHFZ3M2, DXVO4M2, DFJO4M2, DI3JO4M2, CHJO4M2, CGFZ3M2 4-DELLATITUDE 7490 C1,5 QC 1.7GHZ, Serial Nos. - 7RZLSN2, DZBMSN2, CHONSN2, 995MSN2	
--	--	--	--	--	---	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-012330 03/29/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 29US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3650 Lenox Road, Atlanta, Georgia 30326	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-029608 06/29/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 30US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as	

					indicating that the transaction is other than a true lease. Equipment Location: 3650 Lenox Road, Atlanta, Georgia 30326	
--	--	--	--	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	CSI Leasing Canada Ltd.	Georgia Cooperative Authority (Barrow County)	007-2018-041182 09/05/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 31CN to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 1 Lappon's Lane, Kingston ,Ontario K7L 4Z5	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-042900 09/17/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 32US to Master Lease 300333 between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3650 Lenox Road, Atlanta, Georgia 30326	

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	C T Corporation System, as Representative	Georgia Cooperative Authority (Barrow County)	007-2018-053241 11/29/2018	UCC-1	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 33US to Master Lease 300333 between the parties. Lessor intends that the	

					collateral remain subject to this filing whether the present location is different than what listed or the collateral is subsequently moved to a different location. This Filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. Equipment Location: 3650 Lenox Road, Atlanta, Georgia 30326	
Novelis Inc.	Citicorp North America, Inc.	Georgia Cooperative Authority (Fulton County)	060-2005-000870 01/19/2005	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2007-008480 07/13/2007	UCC-3 Termination (original file # 060-2005-000870)		
Novelis Inc.	LaSalle Business Credit, LLC	Georgia Cooperative Authority (Fulton County)	060-2007-008157 07/05/2007	UCC-1		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
		Georgia Cooperative Authority (Fulton County)	060-2008-009569 09/22/2008	UCC-3 Amendment (original file # 060-2007-008157)		
		Georgia Cooperative Authority (Fulton County)	060-2010-008087 09/10/2010	UCC-3 Amendment (original file # 060-2007-008157)		
		Georgia Cooperative Authority (Fulton County)	060-2010-010957 12/20/2010	UCC-3 Termination (original file # 060-2007-008157)		
Novelis Inc.	UBS AG Stamford Branch	Georgia Cooperative Authority (Fulton County)	060-2007-008159 07/05/2007	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2010-008089 09/10/2010	UCC-3 Termination (original file # 060-2007-008159)		
		Georgia Cooperative Authority (Fulton County)	060-2010-010956 12/20/2010	UCC-3 Termination (original file # 060-2007-008159)		
Novelis Inc.	Bank of America, N.A., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2010-008772 10/04/2010	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2010-010954 12/20/2010	UCC-3 Termination (original file # 060-2010-008772)		
Novelis Inc.	UBS AG, Stamford Branch, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2010-008773 10/04/2010	UCC-1		

		Georgia Cooperative Authority (Fulton County)	060-2010-010955 12/20/2010	UCC-3 Termination (original file # 060-2010- 008773)		
--	--	---	-------------------------------	--	--	--

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Bank of America, N.A., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2010-010959 12/20/2010	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2015-005107 06/10/2015	UCC-3 Amendment (original file # 060-2010- 010959)		
		Georgia Cooperative Authority (Fulton County)	060-2015-008937 10/07/2015	UCC-3 Continuation (original file # 060-2010- 010959)		
		Georgia Cooperative Authority (Fulton County)	060-2016-008401 10/06/2016	UCC-3 Amendment (original file # 060-2010- 010959)		
		Georgia Cooperative Authority (Fulton County)	060-2017-000458 01/19/2017	UCC-3 Termination (original file # 060-2010- 010959)		
Novelis Inc.	Bank of America, N.A., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2010-010961 12/20/2010	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2013-004171 05/14/2013	UCC-3 Assignment (original file # 060-2010- 010961)		
		Georgia Cooperative Authority (Fulton County)	060-2015-006320 07/17/2015	UCC-3 Continuation (original file # 060-2010- 010961)		
		Georgia Cooperative Authority (Fulton County)	060-2016-008201 10/03/2016	UCC-3 Amendment (original file # 060-2010- 010961)		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2013-004168 05/14/2013	UCC-1		

Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2014-008710 10/07/2014	UCC-3 Amendment (original file # 060-2013- 004168)		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2016-008200 10/03/2016	UCC-3 Amendment (original file # 060-2013- 004168)		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2017-008789 11/22/2017	UCC-3 Continuation (original file # 060-2013- 004168)		
Novelis Inc.	Wells Fargo	Georgia	060-2014-008709	UCC-1		

	Bank, National Association, as Collateral Agent	Cooperative Authority (Fulton County)	10/07/2014			
		Georgia Cooperative Authority (Fulton County)	060-2016-008202 10/03/2016	UCC-3 Amendment (original file # 060-2014-008709)		
Novelis Inc.	Bank of America, N.A., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2015-004798 06/03/2015	UCC-1		
		Georgia Cooperative Authority (Fulton County)	060-2016-008400 10/06/2016	UCC-3 Amendment (original file # 060-2015-004798)		
		Georgia Cooperative Authority (Fulton County)	060-2017-000461 01/19/2017	UCC-3 Termination (original file # 060-2015-004798)		
Novelis Inc.	Morgan Stanley Senior Funding, Inc., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2015-005166 06/11/2015	UCC-1		
Novelis Inc.	Morgan Stanley Senior Funding, Inc., as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2016-006398 08/02/2016	UCC-3 Termination (original file # 060-2015-005166)		
Debtor	Secured Party	Jurisdiction/ Office	File Number/ Date Filed	Type of UCC	Description of Collateral	Disposition
Novelis Inc.	Standard Charter Bank, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2017-000357 01/17/2017	UCC-1		
Novelis Inc.	Wells Fargo Bank, National Association, as Collateral Agent	Georgia Cooperative Authority (Fulton County)	060-2017-006813	UCC-1	All assets now owned or hereafter acquired by the debtor or in which debtor otherwise has rights.	
Novelis Corporation	Cisco Systems Capital Corporation	Georgia Cooperative Authority (Barrow County)	007-2012-019002 07/24/2012	UCC-1		
Novelis Corporation	Applied Industrial Technologies, Inc.	Georgia Cooperative Authority (Fulton County)	060-2014-009500 11/04/2014	UCC-1		
Novelis Corporation	Mitsubishi International Corporation	Georgia Cooperative Authority (Coweta County)	038-2016-018287 12/22/2016	UCC-1		
Novelis Corporation	Liquidix, Inc., as Platform Collateral Agent	Georgia Cooperative Authority (Barrow County)	007-2018-043997 09/24/2018	UCC-1	Assets described on Schedule A attached hereto and made a part hereof.	

(b) PPSA

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	---	---	---------------------------	----------

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	--	---	---------------------------	----------

			Registration			
1	NOVELIS INC.	CSI LEASING CANADA LTD.	743313096 1641 1902 2161 2018/08/31	5	ACCOUNTS, EQUIPMENT, OTHER	Various goods, equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 31CN to Master Lease 300333, between the Parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. this filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. equipment location 1 Lappon's Lane, Kingston, Ontario K7L 4Z5

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years))	Collateral Classification	Comments
2	NOVELIS INC.	CSI LEASING CANADA LTD.	737427402 1804 1901 5711 2018/03/20	5	ACCOUNTS, EQUIPMENT, OTHER	Various goods, equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule 28CN to Master Lease 300333, between the Parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. this filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. equipment location 1 Lappon's Lane, Kingston, Ontario K7L 4Z5
3	NOVELIS INC. NOVELIS FOIL PRODUCTS	DE LAGE LANDEN FINANCIAL SERVICES CANADA INC.	736418385 1440 1530 3781 2018/02/12	4	ACCOUNTS, EQUIPMENT, OTHER	All personal property of the Debtor financed by the Secured Party, wherever situated, consisting of 2017/RICO / RPTRSDD/R14841/C/W attachments and accessories, together with all parts and accessories relating thereto, all attachments, accessories and accessions thereto or thereon, all replacements, substitutions, additions and improvements of all or any part of the foregoing and all proceeds in any form derived therefrom.

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years))	Collateral Classification	Comments
4	NOVELIS INC.	CSI LEASING CANADA LTD.	732527793 1727 1902 9620 2017/10/02	5	ACCOUNTS, EQUIPMENT, OTHER	Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 24CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits

					in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral.
--	--	--	--	--	--

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
1044	NOVELIS INC. 474.08-CHISR01A - MS		1725 1901 4081 A Amendment 2018/08/15			Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 24CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. see below for a listing of equipment, software, and personal property. amending to add specific collateral and serial numbers, pursuant to Equipment Schedule No. 24CN to master lease no. 300333. equipment location 1 Lappan's Lane, Kingston, ON K7L 4Z5 (4) Dell Precision 7510 CI7 QC 2.7Ghz, serial numbers 1129PH2, J329PH2, GS79PH2, 3P79PH2 (2) Dell Latitude 5285 CI5 DC 2.6Ghz serial numbers 30VJNH2, DYQ13M2 (6) Dell Latitude 7480 CI7 DC 2.8Ghz serial numbers 3BX8NH2, JMQ1NH2, D7M7NH2, D5M7NH2, 46M7NH2, BLLRGH2 (6) Dell OptiPlex 5050 CI3 DC
		W				

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
5	NOVELIS INC. NOVELIS FOIL PRODUCTS	DE LAGE LANDEN FINANCIAL SERVICES CANADA INC.	727185987 1439 1530 1463 2017/05/02	4	ACCOUNTS, EQUIPMENT, MOTOR VEHICLE	All personal property of the Debtor described herein by vehicle identification number or serial number, as applicable, wherever situated,

					INCLUDED, OTHER	together with all parts and accessories relating thereto, all attachments, accessories and accessions thereto or thereon, all replacements, substitutions, additions and improvements of all or any part of the foregoing and all proceeds in any form derived therefrom.
	NOVELIS INC.		1930 1531 0212 2018/01/19	1		
	NOVELIS INC.		1930 1531 0213 A Amendment 2018/01/19			Model year should have been 2017 2017 RICO / RPTRSD (VIN: R14841)

1044474.08-CHISR01A - MSW

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
6	NOVELIS INC.	CSI LEASING CANADA LTD.	725960961 1637 1901 0525 2017/03/27	5	EQUIPMENT	Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to Lessee pursuant to Equipment Schedule 21CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral.

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	---	--	---------------------------	----------

1044	474.08-CHISR01A - MS	W	1517 1901 2372 A Amendment 2018/04/27		Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to Lessee pursuant to Equipment Schedule 21CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. see below for a listing of equipment, software, and personal property. amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 21CN to Master Lease no. 300333. equipment location- 1 Lappan's Lane, Kingston, ON K7L 4Z5 2-Dell-Latitude 5285 CI5 DC 2.6Ghz, serial nos. - 2RFF9H2, DBV79H2 2- Dell-Latitude 5289 CI5 DC 2.6Ghz, serial nos. BRD6FH2, JPSYDH2 4- Dell-Latitude 7480 CI5 DC 2.6Ghz, serial nos. - 50P14H2, FW2K4H2, 3H7F4H2, J1YQ3H2 8Dell-Latitude e7470 CI5 DC 2.4Ghz, serial nos. 543YZF2, G13YZF2, JS8YZF2, GCGYZF2, JS8YZF2, 2CCXZF2,
------	----------------------	---	--	--	--

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
7	NOVELIS INC.	WELLS FARGO EQUIPMENT FINANCE COMPANY	725541516 0959 5064 8499 2017/03/13	6	EQUIPMENT	All goods which are photocopiers, multifunction devices, printers, production printers, fax machines, projectors, video conferencing, interactive whiteboards, servers, and software manufactured, distributed, or sold by Ricoh Canada Inc. the goods described herein together with all attachments, accessories, accessions, replacements, substitutions, additions and improvements thereto, and "all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, and without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance

					payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. (Reference No. 9895687-001) (FOR INTERNAL USE ONLY) (as may be amended or updated from time to time)
--	--	--	--	--	--

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
8	NOVELIS INC.	DE LAGE LANDEN FINANCIAL SERVICES CANADA INC.	725537304 1935 1531 0131 2017/03/10	4	ACCOUNTS, EQUIPMENT, MOTOR VEHICLE INCLUDED, OTHER	All personal property of the Debtor described herein by Vehicle Identification Number or Serial Number, as applicable, and such other goods financed by the secured party, wherever situated, consisting of (1) Cascade 2016 120D forklift clamp s/n 2133794t1, together with all parts and accessories relating thereto, all attachments, accessories and accessions thereto or thereon, all replacements, substitutions, additions and improvements of all or any part of the foregoing and all proceeds in any form derived therefrom.
	NOVELIS INC.		1936 1531 1916 A Amendment 2017/03/14		ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	Remove amount secured - field should have been blank.
9	NOVELIS INC.	STANDARD CHARTERED BANK	723865887 1432 1862 4824 2017/01/05	10	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
10	NOVELIS INC.	WELLS FARGO EQUIPMENT FINANCE COMPANY	723280923 1600 5064 1218 2016/12/09	6	EQUIPMENT	The goods described herein together with all attachments, accessories, accessions, replacements, substitutions, additions and improvements thereto, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, and without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. (Reference No. 9895687-001) (FOR INTERNAL USE ONLY) (as may be amended or updated from time to time)

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	---	---	---------------------------	----------

	NOVELIS INC.		1447 5064 9453 A Amendment 2017/03/27			All goods which are photocopiers, multifunction devices, printers, production printers, fax machines, projectors, video conferencing, interactive whiteboards, servers, and software manufactured, distributed, or sold by Ricoh Canada Inc. The goods described herein together with all attachments, accessories, accessions, replacements, substitutions, additions and improvements thereto, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, and without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. (Reference No. 9895687-001) (FOR INTERNAL USE ONLY) (as may be amended or updated from time to time)
--	--------------	--	--	--	--	---

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years))	Collateral Classification	Comments
11	NOVELIS INC.	CSI LEASING CANADA LTD.	720862371 1800 1901 8908 2016/09/22	5	EQUIPMENT	Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 18CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral.

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years))	Collateral Classification	Comments
-----	-----------	--------------------	---	--	---------------------------	----------

1044	NOVELIS INC. 474.08-CHISR01A - MS		1639 1901 8392 A Amendment 2017/05/16			Amend General Collateral: Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 18CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. see below for a listing of equipment, software, and personal property. amending to specify collateral and serial numbers, pursuant to Equipment Schedule No. 18CN to Master Lease No. 300333. – 1 Lappan's Lane, Kingston, ON K7L 4Z5 qty machine type/model description serial number 1 Dell OptiPlex 5040 CI5 QC 3.2Ghz GDG5SD2 1 Dell OptiPlex 5040 CI5 QC 3.2Ghz GDG6SD2 1 Dell OptiPlex 5040 CI5 QC 3.2Ghz GDG4SD2 1 Dell Precision 7510 CI7 QC 2.7Ghz CFKCPF2 1 Dell Latitude E7270 CI5 DC 2.4Ghz 381XPF2 1 Dell OptiPlex 5040 CI5 QC 3.2Ghz FFD7ND2 1 Dell Latitude E7470 CI5
------	-----------------------------------	--	---	--	--	---

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
12	NOVELIS INC.	CSI LEASING CANADA LTD.	715893165 1718 1901 7883 2016/04/21	5	EQUIPMENT	Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 1 to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or

						damage to the collateral or proceeds of the collateral.
--	--	--	--	--	--	---

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
	NOVELIS INC.		1801 1901 9775 A Amendment 2016/05/05			General Collateral Amended: Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 15CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral.

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	--	---	---------------------------	----------

1044	NOVELIS INC. 474.08-CHISR01A - MS		20170427 1925 1901 5117 A Amendment 2017/04/27			General Collateral Amended: Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to lessee pursuant to Equipment Schedule 15CN to Master Lease No. 300333, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral. See below for a listing of equipment, software, and personal property. amending to specify collateral and serial numbers, pursuant to equipment schedule no. 015cn to master lease no. 300333. equipment location – 1 Lappan's Lane, Kingston, ON K7L 4Z5 qty machine type/model description serial number 1 Dell Latitude E7270 CI5 DC 2.4Ghz J91XLC2 1 Dell Latitude E7470 CI5 DC 2.4Ghz B06ZLC2 1 Dell Latitude E7470 CI5 DC 2.4Ghz 3S5ZLC2 1 Dell Latitude E7470 CI5 DC 2.4Ghz FCT0MC2 1 Dell Precision 7510 CI7 QC 2.7Ghz 9XG2MC2 1 Dell OptiPlex 5040 CI5 QC 3.2Ghz CYZCQD2 1
------	-----------------------------------	--	--	--	--	--

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
13	NOVELIS INC.	CSI LEASING, INC.	699806862 1111 1902 9587 2014/09/15	5	EQUIPMENT	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to SmartTrack Schedule No. 5 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. equipment location? 3560 Lenox Road NE, Suite 200, Atlanta, GA-30326

14	NOVELIS INC.	ACKLANDS- GRAINGER INC.	698906664 1012 1462 4594 2014/08/14	5	EQUIPMENT	Acklands-Grainger dispensing equipment S/N SECM-0517 and SECM-0565 and SECA0562
----	--------------	----------------------------	---	---	-----------	---

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
15	NOVELIS INC.	CSI LEASING, INC.	696751704 1703 1901 9857 2014/06/03	5	EQUIPMENT	Various equipment, software, and personal property (together with all repairs, accessions, accessories, and replacements) leased to Lessee pursuant to Equipment Schedule No. 4 to Master Lease 275857, between the parties. Lessor intends that the collateral remain subject to this filing whether the present location is different than that listed or the collateral is subsequently moved to a different location. This filing is for precautionary purposes in connection with an equipment leasing transaction and is not to be construed as indicating that the transaction is other than a true lease. equipment location? 3560 Lenox Road NE, Suite 200, Atlanta, GA-30326

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
16	NOVELIS INC.	CSI LEASING CANADA LTD.	693375939 1605 1902 7767 2014/01/24	1	EQUIPMENT	Various equipment, software, peripherals, and personal property, together with all attachments, accessories, accessions, repairs, replacements, substitutions, additions and improvements thereto leased to Lessee pursuant to Equipment Schedule No. 3 to Master Lease No. 275857, and all proceeds in any form derived directly or indirectly from any dealing with the collateral or proceeds thereof, including without limitation, money, cheques, deposits in deposit-taking institutions, goods, accounts receivable, rents or other payments arising from the lease of the collateral, chattel paper, instruments, intangibles, documents of title, securities, and rights of insurance payments or any other payments as indemnity or compensation for loss or damage to the collateral or proceeds of the collateral.
	NOVELIS INC.		1230 1902 6209 B Renewal 2014/07/09	4		

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
17	NOVELIS INC.	Dell FINANCIAL SERVICES CANADA LIMITED	680614245 1428 8077 5385 2012/08/10	5	EQUIPMENT, OTHER	All Dell and non Dell computer equipment and peripherals wherever located heretofore or hereafter leased to debtor by secured party pursuant to a Master Lease Agreement No. 5636320 together with all substitutions, additions, accessions and replacements thereto and thereof now and hereafter

						installed in, affixed to, or used in conjunction with such equipment and proceeds thereof together with all rental or installment payments, insurance proceeds, other proceeds and payments due or to become due and arising from or relating to such equipment. proceeds all present and afteracquired personal property.
18	NOVELIS INC.	Dell FINANCIAL SERVICES CANADA LIMITED	1638 8077 8513 2017/08/01	5		
19	NOVELIS INC.	BANK OF AMERICA, N.A.	666570429 0951 1590 3589 2010/12/15	7	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
	NOVELIS INC.	BANK OF AMERICA, N.A. (Assignor) WELLS FARGO BANK, NATIONAL ASSOCIATION (Assignee)	0858 1862 5209 D Assignment 2013/05/13			

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
	NOVELIS INC.		0902 1862 5216 B Renewal 2013/05/13	4		
	NOVELIS INC.		1702 1862 7327 A Amendment 2016/01/13			The Secured Party has released its security interest in all property (as such term is defined in an Agreement of Purchase and Sale dated as of February 1, 2014, as amended effective March 23, 2015, and JANUARY 8, 2016 between Novelis Inc., as Vendor, and 2390540 Ontario Inc. (operating as Jag Real Estate Property Holdings), as assigned to 9229205 Canada Inc., as Purchaser)
	NOVELIS INC.		1640 9234 0319 A Amendment 2016/10/05			The Secured Party has released its Security Interest in 78,234,054 ordinary shares in the capital of Aluminium company of Malaysia Berhad (Company No. 3859-U), a company duly incorporated in Malaysia.
	NOVELIS INC.		1107 1862 3418 B Renewal 2017/08/31	5		
20	NOVELIS CAST HOUSE TECHNOLOGY LTD.	BANK OF AMERICA, N.A.	666570474 0953 1590 3593 2010/12/15	7	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of	Registration (including Renewal Periods (years)	Collateral Classification	Comments
-----	-----------	--------------------	--	---	---------------------------	----------

			Registration			
	NOVELIS CAST HOUSE TECHNOLOGY LTD.	BANK OF AMERICA, N.A. (Assignor) WELLS FARGO BANK, NATIONAL ASSOCIATION (Assignee)	0858 1862 5208 D Assignment 2013/05/13			
	NOVELIS CAST HOUSE TECHNOLOGY LTD.		0902 1862 5215 B Renewal 2013/05/13	4		
	NOVELIS CAST HOUSE TECHNOLOGY LTD.		1626 1862 0885 A Amendment 2014/09/17			To add an additional address of the Debtor for Registration Number 2010/12/15 0953 1590 3593.
	NOVELIS CAST HOUSE TECHNOLOGY LTD.		1231 1862 1641 A Amendment 2014/09/29			To remove the Debtor on Page 01, Line 03 of Registration Number 2010/12/15 0953 1590 3593.
	NOVELIS CAST HOUSE TECHNOLOGY LTD. NOVELIS INC.		20150511 1301 1862 7889 E Transfer 2015/05/11			

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods years)	Collateral Classification	Comments
	NOVELIS INC.		1702 1862 7329 A Amendment 2016/01/13			The Secured Party has released its Security Interest in all property (as such term is defined in an Agreement of Purchase and Sale dated as of February 1, 2014, as amended effective march 23, 2015, and January 8, 2016 between Novelis Inc., as Vendor, and 2390540 Ontario Inc. (operating as jag real estate property holdings), as assigned to 9229205 Canada Inc., as Purchaser)
	NOVELIS INC.		1641 9234 0321 A Amendment 2016/10/05			The Secured Party has released its Security Interest in 78,234,054 ordinary shares in the capital of Aluminium Company of Malaysia Berhad (Company No. 3859-U), a company duly incorporated in Malaysia.
	NOVELIS INC.		1526 1862 3500 B Renewal 2017/08/31	5		

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods years)	Collateral Classification	Comments
21	NOVELIS INC.	GE VEHICLE AND EQUIPMENT LEASING	666467676 1212 1254 3787 2010/12/09	10	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED,	All present and afteracquired motor vehicles, trailers and goods of whatever make or description, now or hereafter leased by the Secured Party to Debtor, together with all additions, replacement parts, accessions, attachments, and

					OTHER	improvements thereto, and all additions, replacement, parts, accessions, attachments and improvements thereto, and all proceeds thereof, including money, chattel paper, intangibles, goods, documents of title, securities, substitutions, accounts receivable, rental and loan contracts, all personal property returned, traded in or repossessed and all insurance proceeds and any other form of proceeds thereof.
	NOVELIS INC.		1429 1254 4159 A Amendment 2013/01/15		ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	To add one vehicle 2013 Ford Fusion (VIN: 3FA6P0T98DR129289)
	NOVELIS INC.		1026 1254 4164 A Amendment 2013/01/18		ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	To amend Collateral Classification for one vehicle 2013 Ford Fusion VIN 3FA6P0T98DR129289
	NOVELIS INC.	ELEMENT FLEET MANAGEMENT INC.	1438 1530 4766 A Amendment 2013/10/17			Delete Secured Party - GE Vehicle and Equipment Leasing add Secured Party - Element Fleet Management Inc.

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
22	AV METALS INC.	STANDARD CHARTERED BANK	723865914 1432 1862 4827 2017/01/05	10 Expires 05Jan 2027	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
23	AV METALS INC.	BANK OF AMERICA, N.A.	666570456 0952 1590 3591 2010/12/15	7 Expires 15Dec 2026	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
	AV METALS INC.	WELLS FARGO BANK, NATIONAL ASSOCIATION	0856 1862 5205 D Assgnmt 2013/05/13			
	AV METALS INC.		0859 1862 5211 B Renewal 2013/05/13	4		
	AV METALS INC.		1109 1862 3419 B Renewal 2017/08/31	5		
24	4260848 CANADA INC.	STANDARD CHARTERED BANK	723865896 1432 1862 4825 2017/01/05	10 Expires 05Jan 2027	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
25	4260848 CANADA INC.	BANK OF AMERICA, N.A.	666570555 0956 1590 3599 2010/12/15	7 Expires 15Dec 2026	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR	

					VEHICLE INCLUDED, OTHER	
--	--	--	--	--	-------------------------	--

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
	4260848 CANADA INC.	WELLS FARGO BANK, NATIONAL ASSOCIATION	0857 1862 5207 D Assgnmt 2013/05/13			
	4260848 CANADA INC.		0901 1862 5214 B Renewal 2013/05/13	4		
	4260848 CANADA INC.		1626 1862 0884 A Amndmnt 2014/09/17			To add an additional address of the Debtor for Registration Number 2010/12/15 0956 1590 3599.
	4260848 CANADA INC.		1231 1862 1642 A Amndmnt 2014/09/29			To remove the Debtor on Page 01, Line 03 of Registration Number 2010/12/15 0956 1590 3599.
	4260848 CANADA INC.		1109 1862 3420 B Renewal 2017/08/31	5		
26	4260856 CANADA INC.	STANDARD CHARTERED BANK	723865905 1432 1862 4826 2017/01/05	10 Expires 05Jan 2027	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
27	4260856 CANADA INC.	BANK OF AMERICA, N.A.	666570501 0954 1590 3595 2010/12/15	7 Expires 15Dec 2026	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	

No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
	4260856 CANADA INC.	WELLS FARGO BANK, NATIONAL ASSOCIATION	0855 1862 5204 D Assgnmt 2013/05/13			
	4260856 CANADA INC.		0900 1862 5213 B Renewal 2013/05/13	4		
	4260856 CANADA INC.		20140917 1626 1862 0883 A Amndmnt 2014/09/17			To add an additional address of the Debtor for Registration Number 2010/12/15 0954 1590 3595.
	4260856 CANADA INC.					To remove the Debtor on

			1231 1862 1639 A Amndmnt 2014/09/29			Page 01, Line 03 of Registration Number 2010/12/15 0954 1590 3594.
	4260856 CANADA INC.		1049 1862 8555 A Amndmnt 2015/05/21			To remove the additional address for the Debtor on Page 01, Line 04 of Registration Number 2010/12/15 0954 1590 3595.
	4260856 CANADA INC.		1109 1862 3421 B Renewal 2017/08/31	5		
28	8018227 CANADA INC.	STANDARD CHARTERED BANK	723865878 1432 1862 4823 2017/01/05	10 Expires 05Jan 2027	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	
No.	Debtor(s)	Secured Party(ies)	File No. and Registration No./ Date of Registration	Registration (including Renewal Periods (years)	Collateral Classification	Comments
29	8018227 CANADA INC.	BANK OF AMERICA, N.A.	674861472 1102 1529 2970 2011/12/06	5 Expires 06Dec 2032	ACCOUNTS, EQUIPMENT, INVENTORY, MOTOR VEHICLE INCLUDED, OTHER	All assets now owned or hereafter acquired by the Debtor or in which Debtor otherwise has rights.
	8018227 CANADA INC.		1451 1530 7959 A Amndmnt 2011/12/06			Delete the following General Collateral Description "all assets now owned or hereafter acquired by the Debtor or in which Debtor otherwise has rights."
	8018227 CANADA INC.	WELLS FARGO BANK, NATIONAL ASSOCIATION	0855 1862 5203 D Assgnmt 2013/05/13			
	8018227 CANADA INC.		0903 1862 5217 B Renewal 2013/05/13	11		
	8018227 CANADA INC.		1951 1531 4264 A Amndmnt 2014/09/17			To add an additional address of the Debtor on Registration Number 2011/12/06 1102 1529 2970.
	8018227 CANADA INC.		1232 1862 1643 A Amndmnt 2014/09/29			To remove the Debtor on Page 01, Line 03 of registration number 2011/12/06 1102 1529 2970.
	8018227 CANADA INC.		1109 1862 3422 B Renewal 2017/08/31	5		

(c) Other:

"Notice of Contamination made on April 13, 2015 pursuant to Section 21.58 of the Environment Quality Act (CQLR, c. Q-2) registered at the Land Registry Office for the registration division of Chicoutimi on April 20, 2015 under the number 21 465 828 against a part of the property located at 2040 Fay Street, in the City of Saguenay (Borough of Jonquière), Province of Québec, Canada G7S 2N4 (i.e. lot 3 418 146 of the Cadastre of Québec)."

Schedule 6.04(b)**Equity Investments****A. EQUITY INVESTMENTS**

<u>Issuer</u>	<u>Record Owner (Beneficial Owner, if different)</u>	<u>Percentage Ownership</u>
Aluminum Norf GmbH	Novelis Deutschland GmbH	50%
Logan Aluminum Inc.	Novelis Corporation	40%
Deutsche Aluminium Verpackung Recycling GmbH	Novelis Deutschland GmbH	30%
France Aluminium Recyclage SA	Novelis Deutschland GmbH	20%
Ulsan Aluminum Ltd.	Novelis Korea Limited	50%
Novelis Switzerland SA	AluInfra Services SA	50%

B. OTHER INVESTMENTS

A joint and several surety by Novelis Switzerland SA and its landlord, Listex, of up to CHF \$3,000,000 in connection with a loan to Listex used to finance its purchase of the property leased by Novelis Switzerland SA.

Schedule 9.01(b)**Cash Management**

<u>OWNER</u>	<u>TYPE OF ACCOUNT</u>	<u>ACCOUNT JURISDICTION</u>	<u>BANK OR INTERMEDIARY</u>	<u>ACCOUNT NUMBER</u>	<u>CONTROL AGREEMENT/ NOTICE</u>
Novelis Inc.	Disbursement	Canada	Citibank - Canada	[Bank Account Information Omitted]	DACA
Novelis Inc.	Disbursement	Canada	Citibank - Canada	[Bank Account Information Omitted]	DACA
Novelis Inc.	Disbursement	Canada	Citibank - Canada	[Bank Account Information Omitted]	DACA
Novelis Inc.	Lockbox	Canada	BOFA-Toronto	[Bank Account Information Omitted]	DACA
Novelis Inc.	Deposit Account	Canada	BOFA-Toronto	[Bank Account Information Omitted]	DACA
AV Metals Inc.	Deposit Account	Canada	Deutsche Bank NY	[Bank Account Information Omitted]	DACA
Novelis AG	Master Cash Pool Account	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Fees Account (not pooled)	Germany	Commerzbank Berlin	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Time Deposit (not pooled)	Germany	Commerzbank Berlin	[Bank Account Information Omitted]	
Novelis Deutschland GmbH	Security and Reserve Account (not pooled)	Germany	Commerzbank Berlin	[Bank Account Information Omitted]	
Novelis Deutschland GmbH	Deposit Account (not pooled)	Germany	Commerzbank Berlin	[Bank Account Information Omitted]	

<u>OWNER</u>	<u>TYPE OF ACCOUNT</u>	<u>ACCOUNT JURISDICTION</u>	<u>BANK OR INTERMEDIARY</u>	<u>ACCOUNT NUMBER</u>	<u>CONTROL AGREEMENT/ NOTICE</u>
---------------------	-------------------------------	------------------------------------	------------------------------------	------------------------------	---

Novelis Deutschland GmbH	Current Account	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Pensions (not pooled)	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Pension	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis Inc.	EUR DDA	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis Sheet Ingot GmbH	Current Account	Germany	Deutsche Bank Hannover	[Bank Account Information Omitted]	Notice
Novelis AG	Master Cash Pool Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Current Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis Switzerland SA	Current Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis Switzerland SA	Current Account	Switzerland	Deutsche Bank Zurich	[Bank Account Information Omitted]	Notice
Novelis AG	Master Cash Pool Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice

<u>OWNER</u>	<u>TYPE OF ACCOUNT</u>	<u>ACCOUNT JURISDICTION</u>	<u>BANK OR INTERMEDIARY</u>	<u>ACCOUNT NUMBER</u>	CONTROL AGREEMENT/ NOTICE
Novelis AG	Master Cash Pool Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis AG	Purchaser Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Current Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Current Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Deutschland GmbH	Account Payable (not pooled)	Finland	Nordea Pamki Suomi Oyi	[Bank Account Information Omitted]	
Novelis Deutschland GmbH	Account Payable	Netherlands	Deutsche Bank Amsterdam	[Bank Account Information Omitted]	
Novelis Europe	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice

Holdings Ltd				Omitted]	
Novelis Europe Holdings Ltd	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Europe Holdings Ltd	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Sheet Ingot GmbH	Current Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Switzerland SA	Current Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice

<u>OWNER</u>	<u>TYPE OF ACCOUNT</u>	<u>ACCOUNT JURISDICTION</u>	<u>BANK OR INTERMEDIARY</u>	<u>ACCOUNT NUMBER</u>	CONTROL AGREEMENT/ NOTICE
Novelis Switzerland SA	Current Account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis U.K. Ltd	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis U.K. Ltd	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis U.K. Ltd	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis U.K. Ltd.	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis U.K. Ltd.	Current account	U.K.	Deutsche Bank London	[Bank Account Information Omitted]	Notice
Novelis Corporation	Overdraft	USA	Citibank NY	[Bank Account Information Omitted]	DACA
Novelis Corporation	Lockbox - Trade	USA	Bank of America	[Bank Account Information Omitted]	DACA
Novelis Corporation	Lockbox – Misc.	USA	Bank of America	[Bank Account Information Omitted]	DACA
DIFCNovelis Corporation	Cafeteria Deposit	USA	Compass Federal Credit Union	[Bank Account Information Omitted]	DACA
Novelis Corporation	Concentration	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corporation	Investment Account	USA	JPMorgan - NY	[Bank Account Information Omitted]	SACA
Novelis Inc.	Concentration	USA	Deutsche Bank NY	[Bank Account Information Omitted]	DACA
<u>OWNER</u>	<u>TYPE OF ACCOUNT</u>	<u>ACCOUNT JURISDICTION</u>	<u>BANK OR INTERMEDIARY</u>	<u>ACCOUNT NUMBER</u>	CONTROL AGREEMENT/ NOTICE
Novelis Inc.	Investment Account	USA	JPMorgan NY	[Bank Account Information Omitted]	SACA
Novelis Holdings Inc.	DDA	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis	DDA	USA	Deutsche Bank	[Bank Account	DACA

Services Limited				Information Omitted]	
Novelis Inc.	Concentration	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Concentration	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Concentration	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Concentration	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Canco 3	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Canco 1	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Corp	Canco 2	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA
Novelis Global Employment Organization , Inc.	Deposit Account	USA	Deutsche Bank	[Bank Account Information Omitted]	DACA

EXHIBIT P-9

954478.05-CHISR02A - MSW

NOVELIS INC.
CHANGE IN CONTROL SEVERANCE PLAN

INTRODUCTION

Novelis Inc. recognizes that the possibility of a change in control may exist from time to time, and that this possibility and the resulting uncertainty may result in the departure or distraction of management personnel. The Board therefore has decided to adopt this Change in Control Severance Plan to encourage the continued attention and dedication of Novelis Inc. management to their duties without the distraction that may arise from the possibility of a change in control.

Article I
ESTABLISHMENT OF PLAN

Effective as of the Effective Date, the Company establishes the Novelis Inc. Change in Control Severance Plan, as set forth below.

ARTICLE II
DEFINITIONS

As used herein, the following words and phrases shall have the following respective meanings unless the context clearly indicates otherwise.

Affiliate. Any subsidiary of the Company with respect to which the Company owns, directly or indirectly, 50% or more of the outstanding securities or voting control of the subsidiary.

Annual Bonus. The Participant's target short-term incentive opportunity for the fiscal year in which the Change in Control occurs.

Annual Base Salary. Annual base salary (including all amounts of such base salary that are voluntarily deferred under any qualified and non-qualified plans of the Company) determined at the highest rate in effect during the 12-month period immediately preceding a Participant's Date of Termination.

Board. The Board of Directors of Novelis Inc.

Cause. "Cause" means any of the following: (i) Employee's conviction of any crime (whether or not involving the Company) constituting a felony in the applicable jurisdiction; (ii) willful and material violation of the Company's policies, including, but not limited to those relating to sexual harassment and confidential information; (iii) willful misconduct in the performance of Employee's duties for the Company; or (iv) willful and repeated failure or refusal to perform the Employee's material duties and responsibilities which is not remedied within ten (10) days after written demand from the Board or the Chief Employee Officer to remedy such failure or refusal.

Change in Control. The first to occur of any of the following events:

- (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control shall not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or
- (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or
- (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or

- (iv) the stockholders of the Company approve a plan of complete liquidation or dissolution; or
- (v) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

For purposes of this Section, "beneficial ownership" shall be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

Code. The Internal Revenue Code of 1986, as amended from time to time. Any reference to a section of the Code shall include such section and any comparable section or sections of any future legislation that amends, supplements or supersedes such section.

Committee. The Compensation Committee of the Board.

Company. Novelis Inc. and any successor thereto.

Date of Termination. (i) If the Participant's employment is terminated for Cause, or by the Participant for Good Reason, the date of receipt of the Notice of Termination or such later date specified in the Notice of Termination, as the case may be, (ii) if the Participant's employment is terminated other than for Cause or Disability, the date on which the Company notifies the Participant of such termination, (iii) if the Participant resigns without Good Reason, the date on which the Participant notifies the Company of such termination, and (iv) if the Participant's employment is terminated by reason of death or Disability, the date of death of the Participant or the 30th day after receipt of such notice by the Participant, as the case may be. Notwithstanding the foregoing, in no event shall the Date of Termination occur until the Participant experiences a "separation from service" within the meaning of Section 409A of the Code, and the date on which such separation from service takes place shall be the "Date of Termination."

Disability. Permanently and totally disabled and unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of twelve months. A Participant's "Disability" will be based upon the determination of his or her eligibility for benefits under the Company's long term disability plan.

Effective Date. July 1, 2018.

Employee. Any full-time, regular employee of the Company or an Affiliate.

Good Reason. "Good Reason" means any of the following if it shall occur without the Participant's express written consent: (i) a material reduction in the Participant's position, duties, reporting relationships, responsibilities, authority, or status with the Company; (ii) a material reduction in the Participant's base salary and target short term and long term incentive opportunities in effect on the date hereof or as the same may be increased from time to time during the term of the Plan; (iii) any requirement that the Participant relocate more than fifty (50) miles from the area in which the Participant regularly performs his or her duties for the Company, except for required travel by the Participant on the Company's business to an extent substantially consistent with the Participant's normal business travel obligations; or (iv) any material failure of the Company to comply with its obligations under the Plan. A Participant must provide notice to the Company of the existence of any of the foregoing conditions within thirty (30) days of the initial existence of any such condition, and the Company shall have a period of thirty (30) days following receipt of such notice to cure any such condition, without being required to pay the amounts and other benefits contemplated by this Plan.

Notice of Termination. The written notice of termination of employment required to be provided by either party to the other.

Participant. An Employee employed in a role that has been designated by the Committee for participation in the Plan.

Plan. The Novelis Inc. Change in Control Severance Plan.

Qualifying Termination. A "Qualifying Termination" shall occur if a Participant's employment is involuntarily terminated for any reason other than for Cause, Disability or death, or if the Participant shall terminate his or her employment for Good Reason, in either case within three (3) months preceding or twenty-four (24) months following a Change in Control.

Section 409A. Section 409A of the Code, and the rules and regulations issued thereunder.

Separation Benefits. The benefits described in Article IV that are provided to qualifying Participants under the Plan.

ARTICLE III **ELIGIBILITY**

3.1 Participation. Each Employee employed in a role that has been designated in writing as eligible for this Plan and approved by the Committee shall be a Participant in the Plan. Appendix A of this Plan, as it may be updated from time to time and approved by the Committee, shall contain a

current list of Participants.

3.2 Duration of Participation. The Committee may remove an Employee as a Participant by approving the removal the Employee's name and/or title from Appendix A of this Plan, as it may be updated from time to time, and upon written notice of removal to such Employee; *provided* that no such removal shall be effective (a) during the two year period following a Change in Control, (b) if effectuated in connection with a potential Change in Control or (c) at such time as the Participant is entitled to payment of a Separation Benefit or any other amounts payable under the Plan. In addition, a Participant shall cease to be a Participant in the Plan as a result of an amendment or termination of the Plan complying with Article VI of the Plan, or when the Participant ceases to be an Employee or no longer qualifies as a Participant under Section 3.1, unless, at the time the Participant ceases to be an Employee or no longer qualifies as a Participant under Section 3.1, such Participant is entitled to payment of a Separation Benefit or any other amounts payable under the Plan or there has been an event or occurrence constituting Good Reason that would enable the Participant to terminate employment and receive a Separation Benefit. A Participant entitled to payment of a Separation Benefit or any other amounts payable under the Plan shall remain a Participant in the Plan until the full amount of the Separation Benefit and any other amounts payable under the Plan have been paid to the Participant.

ARTICLE IV

SEPARATION BENEFITS

4.1 Termination of Employment Giving Rise to Separation Benefits. A Participant shall be entitled to Separation Benefits as set forth in Section 4.2 below if the Participant experiences a Qualifying Termination and executes a release and waiver of claims as set forth in Section 4.3 below. For purposes of this Plan, any purported termination by the Company or by the Participant shall be communicated by written Notice of Termination to the other in accordance with Section 7.3 hereof.

4.2 Separation Benefits.

- (a) If a Participant experiences a Qualifying Termination, then the Company shall pay to the Participant, in a lump sum in cash within thirty (30) days after the Date of Termination, the sum of the following amounts:
 - i. unpaid salary with respect to any paid time off accrued but not taken as of the Date of Termination;
 - ii. accrued but unpaid salary through the Date of Termination;
 - iii. any earned but unpaid annual incentive bonuses from the fiscal year immediately preceding the year in which the Date of Termination occurs (unless (x) such annual incentive bonus is "nonqualified deferred compensation" within the meaning of Section 409A, in which case such bonus shall be paid at the time that bonuses with respect to such fiscal year are or otherwise would be paid in accordance with the terms of the applicable plan or (y) the Participant has made an irrevocable election under any deferred compensation arrangement subject to Section 409A to defer any portion of such annual incentive bonuses, in which case any such deferred bonuses shall be paid in accordance with such election);
 - iv. an amount equal to two (2) times the Participant's Annual Base Salary;
 - v. an amount equal to two (2) times the Participant's Annual Bonus;
 - vi. an amount equal to the Participant's targeted annual incentive bonus for the current fiscal year pro-rated through the Date of Termination; and
 - vii. for the purpose of assisting Participant with the cost of post-employment medical continuation coverage, an amount equal to twenty-four (24) times the full monthly premium charged for coverage under the Company's group medical plan at Participant's then current level of coverage.
- (b) If a Participant experiences a Qualifying Termination, the Participant shall also be entitled to the following benefits:
 - (i) To the extent available, continuation of coverage under the Company's group life plan for a period of twenty-four (24) months at the Participant's pre-termination level of coverage.
 - (ii) Twenty-four (24) months of additional credit for benefit accrual and contribution allocation purposes including credit for age, service and earnings pro-rated over twenty-four (24) months under the Company's tax-qualified and non-qualified pension, savings or other retirement plans; provided that if applicable provisions of the Code prevent payment in respect of such credit under the Company's tax-qualified plans, such payments shall be made under the Company's non-qualified plans.
 - (iii) To the extent Participant is not already fully vested under the Company's tax-qualified and non-qualified retirement pension, savings and other retirement plans, Participant shall become 100% vested under such plans; provided that if applicable provisions of the Code prevent accelerated vesting under the Company's tax-qualified plans, an equivalent benefit shall be payable under the Company's non-qualified plans.

4.3 Release and Waiver of Claims. A Participant's entitlement to Separation Benefits is subject to and conditioned upon the Participant's timely execution of a release and waiver of claims, in a form acceptable to the Board, running in favor of the Company and its Affiliates. No payments or benefits shall be paid under the Plan unless the Participant executes such release and waiver of claims. Notwithstanding the foregoing, the release

and waiver of claims shall not release a Participant's right to receive indemnification and defense from the Company for any claims arising out of the performance of the Participant's duties on behalf of the Company and its Affiliates.

ARTICLE V

SUCCESSOR TO COMPANY

(a) The Company will require any successor or assign (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to absolutely and unconditionally assume and agree to perform the Plan in the same manner and to the same extent that the Company would be required to perform it if no such succession or assignment had taken place. Any failure of the Company to obtain such assumption and agreement prior to the effectiveness of any such succession or assignment shall entitle the Participant to terminate his or her employment for Good Reason.

(b) The Plan shall inure to the benefit of and be enforceable by a Participant's personal and legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If a Participant should die while any amounts are still payable to him or her hereunder, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of the Plan to the Participant's devisee, legatee, or other designee, or if there be no such designee, to the Participant's estate. The services to be provided by the Participant to the Company under the Plan are personal and are not delegable or assignable.

ARTICLE VI

DURATION, AMENDMENT AND TERMINATION

6.1 Duration. The Plan is effective as of the Effective Date and shall remain in effect until terminated pursuant to Section 6.2 below; provided, however, if a Change in Control occurs while this Plan is in effect, this Plan shall continue in full force and effect for at least two (2) years following such Change in Control, and shall not terminate or expire until after all Participants who become entitled to any payments or benefits hereunder shall have received such payments and benefits in full.

6.2 Amendment or Termination. The Company reserves the right to amend, modify, suspend or terminate the Plan at any time by action of a majority of the Board; provided that no such amendment, modification, suspension or termination which has the effect of reducing the right of any Participant shall be effective without the written consent of such Participant if adopted in anticipation of a Change in Control or within the two year period following a Change in Control.

6.3 Procedure for Extension. Any extension, amendment or termination of this Plan by the Board in accordance with this Article VI shall be made by action of the Board in accordance with the Company's charter and by-laws and applicable law.

ARTICLE VII

MISCELLANEOUS

7.1 No Obligation to Mitigate Damages.

(i) A Participant shall not be required to mitigate damages or the amount of any payment provided for under the Plan by seeking other employment or otherwise.

(ii) The provisions of the Plan, and any payment provided for hereunder, shall not reduce any amounts otherwise payable, or in any way diminish a Participant's existing rights, or rights which would accrue solely as a result of the passage of time, under any employee benefit plan or arrangement providing retirement benefits or health, life, disability or similar welfare benefits.

7.2 Non-Duplication of Benefits. Notwithstanding any provision in the Plan to the contrary, if a Participant is entitled to severance benefits under any other plan, agreement or policy of the Company, the Plan shall be construed and administered to avoid any duplication of payments or benefits in the manner determined in the sole and absolute discretion of the Board (or its designee).

7.3 Notice. Any Notice of Termination or other communication relating to the Plan shall be in writing and shall be deemed to have been duly given when delivered or mailed by certified or registered mail, return receipt requested, postage prepaid, as follows:

If to the Company:
Novelis Inc.
Attn: Senior Vice President, General Counsel
3560 Lenox Rd.
Suite 2000
Atlanta, Georgia 30326

If to Employee, to the address of Employee on the books of the Company.

Another address may be used if a party has furnished a different address to the other party in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

7.4 Validity. The invalidity or unenforceability of any provisions of the Plan shall not affect the validity or enforceability of any other provision of the Plan, which shall remain in full force and effect.

7.5 Legal Fees and Expenses. The Company shall pay all legal fees and expenses which a Participant reasonably may incur as a result of the Company's contesting the validity, enforceability or the Participant's interpretation of, or determinations under, the Plan except to the extent the Participant's position is frivolous or carried out in bad faith.

7.6 Withholding. Taxes resulting from any benefits received under the Plan are for the account of the Participant. The Company may withhold from any benefits payable under the Plan all applicable taxes and other amounts as shall be required pursuant to any law or governmental regulation or ruling.

7.7 Code Section 409A. To the extent applicable, the Plan shall be interpreted in accordance with Section 409A of the Code and the applicable U.S. Treasury regulations and other interpretative guidance issued there under, including without limitation any regulations or other guidance that may be issued after the effective date of the Plan. For purposes of determining whether any payment made pursuant to the Plan results in a "deferral of compensation" within the meaning of Treasury Regulation §1.409A-1(b), the Company shall maximize the exemptions described in such section, as applicable. Notwithstanding any provision of the Agreement to the contrary, the Company may adopt such amendments to the Agreement or adopt other policies and procedures, or take any other actions that the Company determines is necessary or appropriate to exempt the Agreement from Section 409A and/or preserve the intended tax treatment of the benefits provided hereunder, or to comply with the requirements of Section 409A and related U.S. Treasury guidance. For purposes of conforming the Plan to Section 409A of the Code, any reference to termination of employment, severance from service or similar terms shall be interpreted and construed to have the same meaning of "separation from service" as defined in Treasury Regulation §1.409A-1(h) (without giving effect to any elective provisions that may be available under such definition) and all payments and benefits under the Plan that would constitute non-exempt deferred compensation for purposes of Section 409A of the Code and that would otherwise be payable hereunder by reason of a Participant's termination of employment, will not be payable to the Participant unless the circumstances giving rise to such termination of employment constitute a Section 409A-compliant separation from service. If the preceding sentence prevents the payment or distribution of any amount or benefit, such payment or distribution shall be made on the date, if any, on which an event occurs that constitutes a Section 409A-compliant separation from service. If a Participant is a specified employee (as defined in Treasury Regulation §1.409A-1(i)) upon separation from service, then payment of any Section 409A deferred compensation amount shall be delayed for a period of six months to the extent required by Section 409A and shall be paid in a lump sum on the first payroll payment date following expiration of such six month period. If a Participant is entitled to be paid or reimbursed for any taxable expenses under the Plan, and such payments or reimbursements are includible in the Participant's U.S. federal gross taxable income, the amount of such expenses reimbursable in any one taxable year of the Participant shall not affect the amount reimbursable in any other taxable year, and the reimbursement of an eligible expense must be made no later than December 31 of the year after the year in which the expense was incurred. No right of a Participant to reimbursement of expenses under the Plan shall be subject to liquidation or exchange for another benefit.

7.8 Attachment. Except as required by law, the right to receive payments under the Plan shall not be subject to anticipation, sale, encumbrance, charge, levy, or similar process or assignment by operation of law.

7.9 Waivers. Any waiver by a party or any breach of the Plan by another party shall not be construed as a continuing waiver or as consent to any subsequent breach by the other party. Except as otherwise expressly set forth herein, no failure on the part of any party hereto to exercise and no delay in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

7.10 Headings. The headings of the sections of the Plan have been inserted for convenience of reference only and shall in no way restrict or modify any of the terms or provisions hereof.

7.11 Governing Law. The Plan shall be governed and construed under the laws of the State of Georgia.

IN WITNESS WHEREOF, the Company has caused this Plan document to be adopted effective as of July 1, 2018.

Novelis Inc.

/s/ HR Shashikant

By: HR Shashikant

Title: Chief Human Resources Officer

Appendix A
Plan Participants

President and Chief Executive Officer
Senior Vice President and Chief Financial Officer
Senior Vice President and General Counsel
Senior Vice President and Chief Human Resources Officer
Senior Vice President and President – North America
Senior Vice President and President – Europe
Senior Vice President and President – Asia

Novelis 2020 Executive Long-Term Incentive Plan

1. **Title and Administration.** This long-term incentive plan (the “2020 Executive LTIP” or the “Plan”) will be administered by the Human Resources department of Novelis Inc. (the “Company”).
2. **Performance Period and Award Date.** The performance period will commence on April 1, 2019 and end on March 31, 2022. The award date will be May 6, 2019, or such later date as may be determined for a participant as provided herein.
3. **Target Opportunity.** Each participant’s target opportunity will be determined by the Company’s Human Resources department or the Compensation Committee of the Company’s Board of Directors (the “Board”), as applicable. Indian Rupee exchange rates will be fixed on the award date.
4. **Plan Design.** A participant’s target opportunity under the Plan will be comprised of Novelis Performance Units, Hindalco Stock Appreciation Rights, and Hindalco Restricted Stock Units.
 - (a) **Novelis Performance Units.** Novelis Performance Units will comprise 50% of each participant’s award under the Plan.
 - (i) **Value.** Each Novelis Performance Unit (“PU”) will have a fixed value of US\$100.
 - (ii) **Vesting.** The PUs are at-risk, and the number of PUs that vest will be determined by the Company’s achievement of ROCE targets established for the performance period. Vesting will range from 50% (threshold) to 200% (maximum) of target award value. Performance results between threshold level and target level or between target level and maximum level will be determined by means of interpolation.
 - (iii) **Definitions.** The following term will have the meaning ascribed to them below; provided, however, that the Board may approve the modification or interpretation of any definition in its sole discretion.
 - *ROCE* means NOPAT divided by fiscal year average CE. ROCE will be calculated for each fiscal year of the performance period. The sum for all fiscal years in the performance period will be divided by the number of fiscal years in the performance period to obtain a simple average.
 - *NOPAT* means (i) Net Income/Loss *plus* (ii) Interest Expense and Amortization of Debt Issuance Costs *less* (iii) Loss (Gain) on Extinguishment of Debt.
 - *CE* means (i) book debt *plus* (ii) book equity *plus* (iii) goodwill impairment (fixed at \$1.5 billion) *less* (iv) cash in excess of \$400 million, *plus* (v) any new impairment impacting equity, provided that this total amount will be normalized for dividend and/or capital payments, if any. Average CE for a fiscal year will be based on the beginning and ending balances for the fiscal year.

- *Net Income* means "Net Income (Loss) Attributable to Our Common Shareholder".
- (iv) *Target Modifications.* In the event the Company completes a significant strategic transaction during the performance period, the Board may, in its sole discretion, modify the ROCE targets established for the performance period.
- (v) *Payments.* Payments will be made in cash in the first quarter following the end of the performance period.
- (b) Hindalco Stock Appreciation Rights. Hindalco Stock Appreciation Rights will comprise 20% of each participant's award under the Plan.
- (i) *Value.* The Black Scholes method of valuation will be used to arrive at the number of SARs to be awarded to participant. Each Hindalco Stock Appreciation Right ("Hindalco SAR") will track the appreciation value of one Hindalco share. Total cash payouts over the term each award will be capped at a maximum of 3.0 times the value on the award date.
- (ii) *Vesting and Expiration.* Hindalco SARs will vest ratably in one-third tranches on each anniversary of the award date, provided the Company achieves at least 75% of the Operating EBITDA before Metal Price Lag target established for the performance year. Hindalco SARs must be exercised no later than the seventh anniversary of the award date.
- (iii) *Exercise.* The exercise price of a Hindalco SAR will be determined by using the average of the high and low prices of a Hindalco share as published by the Bombay Stock Exchange on the award date. Upon exercise, the participant will receive a cash payment equal to the product of (i) the number of Hindalco SARs exercised, times (ii) the increase in value of one Hindalco share from the award date through the date of exercise. If an employee exercises on a date the Bombay Stock Exchange is closed, the exercise price will be the closing price of Hindalco shares on the immediately previous date the Bombay Stock Exchange was open. A participant may exercise vested Hindalco SARs at any time prior to the expiration date.
- (c) Hindalco Restricted Stock Units. Hindalco Restricted Stock Units will comprise 30% of each participant's award under the Plan.
- (i) *Value.* The value of each RSU will be equivalent to the value of one Hindalco share. The initial value of each RSU will be determined by using the average of the high and low prices of a Hindalco share as published by the Bombay Stock Exchange on the award date. Total cash payouts over the term each award will be capped at a maximum of 3.0 times the value on the award date. If the vesting date falls on a date the Bombay Stock Exchange is closed, then the value of each RSU will be the average of the next day's high and low prices.
- (ii) *Vesting.* The RSUs will vest ratably in one- third tranches on each anniversary of the award date and will be paid in cash within 30 days of the applicable vesting date.

5. **Eligibility.** Employees in job bands 4 and higher are eligible to participate in the Plan. An individual must be either employed in an eligible job band or transferred or hired into an eligible job band during the performance year to receive a payout under the Plan. Eligibility and payments for employees who begin employment with the Company after the start of the performance period will be determined by the “Plan Rules Administration” document then in effect as maintained by the Company’s Human Resources department.
- (a) **Employment after Award Date.** Eligibility for employees who begin employment with Novelis after the award date will be determined as follows.
- (i) *First or Second Quarter.* An eligible employee who begins employment after the award date but before the end of the second quarter of the fiscal year will be granted an award at 90% of the target amount for the employee’s job band. The award date will be the following October 1.
- (ii) *Third Quarter.* An eligible employee who begins employment during the third quarter of the fiscal year will be granted an award at 75% of the target amount for the employee’s job band. The award date will be the following January 1.
- (iii) *Fourth Quarter.* An eligible employee who begins employment after the start of the fourth quarter of the fiscal year will not be eligible for an award under the Plan.
- (b) **Promotion after Award Date.** Awards for employees promoted into an eligible job band during the fiscal year will be determined as follows.
- (i) *First Quarter.* An employee who is promoted into an eligible job band during the first quarter of the fiscal year or on July 1 will be eligible for a full award under the Plan.
- (ii) *Second Quarter.* An employee who is promoted into an eligible band during the second quarter of the fiscal year (excluding July 1) will be granted an award at 90% of the target amount for the employee’s job band. The award date will be the following October 1.
- (iii) *Third Quarter.* An employee who is promoted into an eligible job band during the third quarter of the fiscal year will be granted an award at 75% of the target amount for the employee’s job band. The award date will be the following January 1.
- (iv) *Fourth Quarter.* An employee who is promoted into an eligible job band after the start of the fourth quarter of the fiscal year will not be eligible for an award under the Plan in that fiscal year.
6. **Separation from Employment.** Participants whose employment terminates during the performance year will be subject to the applicable terms set forth below.

Event	Awards	Vesting and Exercise Treatment
Death, Disability	SARs	<ul style="list-style-type: none"> • All unvested SARs will vest immediately. • Vested SARs must be exercised within one year, and in no event later than the seventh anniversary of the award date.
	RSUs	<ul style="list-style-type: none"> • All unvested RSUs will vest immediately and will be cashed out 30 days following the date of death or disability.
	PU's	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. • Vested PUs will be cashed out after the end of the performance period.
Retirement	SARs	<ul style="list-style-type: none"> • If Retirement occurs more than one year after the award date, unvested SARs will continue on the vesting schedule and must be exercised no later than the third anniversary of the Retirement date. • Vested SARs must be exercised prior to the expiration date. • If Retirement occurs before the first anniversary of the award date, all unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the RSU vesting rules set forth above. • Vested RSUs will be cashed out 30 days following the date of termination.
	PU's	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. • Vested PUs will be cashed out after the end of the performance period.
Change in Control	SARs	<ul style="list-style-type: none"> • All unvested SARs will vest immediately and the vested portion will be cashed out within 30 days following a change in control.
	RSUs	<ul style="list-style-type: none"> • All unvested RSUs will vest immediately and will be cashed out within 30 days following a change in control.
	PU's	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. • Vested PUs will be cashed out after the end of the performance period.
Intercompany Transfers	SARs	<ul style="list-style-type: none"> • Any unvested SARs scheduled to vest within six months after the date of transfer will continue to vest according to the vesting schedule. • All other unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> • Any unvested RSUs scheduled to vest within six months after the date of transfer will continue to vest according to the vesting schedule. • All other unvested RSUs will be forfeited.
	PU's	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. • Vested PUs will be cashed out after the end of the performance period.
Voluntary Termination	SARs	<ul style="list-style-type: none"> • Participant must exercise unvested SARs within 90 days, and in no event later than the seventh anniversary of the award date. • All unvested SARs will be forfeited.
	RSUs	<ul style="list-style-type: none"> • All RSUs will be forfeited.
	PU's	<ul style="list-style-type: none"> • All PUs will be forfeited.
Involuntary Termination – Without Cause (e.g., plant closure, sale of assets, position elimination)	SARs	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the SAR vesting rules set forth above. • Vested SARs must be exercised within 90 days, and in no event later than the seventh anniversary of the award date.
	RSUs	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the RSU vesting rules set forth above. • Vested RSUs will be cashed out 30 days following the date of termination.
	PU's	<ul style="list-style-type: none"> • Vesting will be prorated based on months of service during the performance period, subject to the PU vesting rules set forth above. • Vested PUs will be cashed out after the end of the performance period.
Involuntary Termination – For Cause	SARs	All SARs will be forfeited.
	RSUs	All RSUs will be forfeited.
	PU's	All PUs will be forfeited.

7. **Definitions.** The following terms will have the meaning ascribed to them below.

- (a) **Retirement** means separation from service with the Company and its subsidiaries and affiliates on or after (i) reaching 65 years of age or (ii) having a combination of age and service greater than or equal to 65 with a minimum age of 55.
- (b) **Change in Control** means the first to occur of any of the following events: (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control shall not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or (iv) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions. For purposes of this Section, "beneficial ownership" shall be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

8. Taxes.

(a)Taxes and Other Withholdings. All payments under this plan shall be subject to applicable tax and other withholdings.

(b)Compliance with §409A of the U.S. Internal Revenue Code. To the extent applicable, this plan shall be interpreted and administered in a manner so that any amount or benefit payable hereunder shall be paid or provided in a manner that is either exempt from or compliant with the requirements Section 409A of the Internal Revenue Code of 1986, as amended (“Section 409A”), and applicable Internal Revenue Service guidance and Treasury Regulations issued thereunder. Notwithstanding anything in this plan to the contrary, all payments and benefits under this plan that would constitute non-exempt “deferred compensation” for purposes of Section 409A and that would otherwise be payable or distributable hereunder by reason of an individual’s termination of employment, will not be payable or distributable to individual unless the circumstances giving rise to such termination of employment meet any description or definition of “separation from service” in Section 409A and applicable regulations (without giving effect to any elective provisions that may be available under such definition). If this provision prevents the payment or distribution of any amount or benefit, such payment or distribution shall be made on the date, if any, on which an event occurs that constitutes a Section 409A-compliant “separation from service.” Further, to the extent the individual is a “specified employee” within the meaning of Section 409A and notwithstanding paragraph 7 or any other provision herein to the contrary, then payment may not be made before the date which is six (6) months after the date of separation from service (or, if earlier, the date of death of individual).

9. **Interpretation and Amendment.** The Company will interpret and construe the terms and conditions of the plan in its sole discretion, including but not limited to all decisions regarding eligibility for, and the amount of benefits payable under, the Plan. The Company also reserves the right to amend or modify this Plan at any time.

10. **No Right to Continued Service.** Nothing in the Plan confers upon any participant the right to continued employment or service with the Company or any subsidiary or affiliate or to otherwise interfere with or restrict the right of the Company or any subsidiary or affiliate to terminate the participant’s employment or service for any reason.

Novelis 2020 Executive Annual Incentive Plan

1. **Title and Administration.** This annual incentive plan (the “2020 Executive AIP” or the “Plan”) will be administered by the Human Resources department of Novelis Inc. (together with its subsidiaries, the “Company”).
2. **Performance Period and Payments.** The performance period will commence on April 1, 2019 and end on March 31, 2020. Payments under the Plan will be made in a lump sum, minus required withholdings, during the first fiscal quarter following the end of the performance year.
3. **Eligibility.** Employees in job bands 3 and higher are eligible to participate in the Plan. An individual must be either employed in an eligible job band or transferred or hired into an eligible job band during the performance year to receive a payout under the Plan. Eligibility and payments for employees who begin employment with Novelis after the start of the performance period will be determined by the “Plan Rules Administration” document then in effect as maintained by the Company’s Human Resources department.
4. **Target Opportunity.** Each participant’s target opportunity will be determined by the Company’s Human Resources department or the Compensation Committee of the Company’s Board of Directors (the “Compensation Committee”), as applicable.
5. **Plan Design.**
 - (a) **Performance Measures.** The following measures will determine payouts under the Plan.

Measure	Weighting	Threshold	Target	Maximum
Operating EBITDA	40%	60%	100%	200%
Free Cash Flow Before Metal Price Lag	35%	50%	100%	200%
Individual Performance per Novelis Performance Management System	15%	60%	100%	200%
Global Safety	10%	50%	100%	200%

- (b) **Performance Threshold.** No payout will be made under the Plan unless Operating EBITDA for the performance year is at least 75% of the target level Operating EBITDA established by the Company. Performance results between threshold level and maximum level are determined by means of interpolation.
 - (c) **Additional Calculation for Certain Participants.** For certain participants identified by the Compensation Committee in its discretion, an Inventory Days modifier will be applied to the Free Cash Flow measure. The payout on this measure may increase or decrease by up to 30% based on performance against Inventory Days targets.

6. **Separation from Employment.** Participants whose employment terminates during the performance year will be subject to the applicable terms set forth below. Any payments to former employees will be made at or near the same date payment is made to active employees under the Plan.

Termination Event	Treatment
Death, Disability or Retirement	Payout will be prorated based on length of employment during the performance period.
Change in Control	Payout will be prorated based on length of employment during the performance period.
Intercompany Transfers	Payout will be prorated based on length of employment during the performance period.
Voluntary Termination	The participant will forfeit the entire payout, and no payout will be made.
Involuntary Termination – For Cause	The participant will forfeit the entire payout, and no payout will be made.
Involuntary Termination – Without Cause (e.g., plant closure, sale of assets, position elimination)	Payout will be prorated based on length of employment during the performance period.

7. **Definitions.** The following terms will have the meaning ascribed to them below; provided, however that the Compensation Committee may approve the modification or interpretation of any definition in its sole discretion.

(a) ***Operating EBITDA*** means “Segment Income” as reported in the Company’s Annual Report on Form 10-K filed with the United States Securities and Exchange Commission (the “Form 10-K”) *reduced by* (1) the impact from re-measuring to current exchange rates any monetary assets and liabilities which are denominated in a currency other than the functional currency of the reporting unit, net of realized and unrealized derivative instruments; and *adjusted by* (2) the impact on cost of working capital management activities to the extent caused by any excess or shortfall of Free Cash Flow described in paragraph 7(b)(iii) below.

(b) ***Free Cash Flow Before Metal Price Lag*** means the Company’s operating free cash flow calculated by removing the following items from “free cash flow” (as defined in the “Liquidity and Capital Resources” section of Item 7 of the Company’s Annual Report on Form 10-K): (1) the impact from timing differences in the pass-through of metal price changes to the Company’s customers, net of realized derivative instruments; and (2) 100% of the impact on inventory of fourth quarter variations in metal prices (including LME and local market premiums); provided, however, that:

- (i) In the event fourth quarter base metal cost (“BMC”) exceeds the budgeted BMC, the adjustment will be calculated as: (i) budgeted ending physical book inventory kilotonnes times (ii) actual fourth quarter BMC, reduced by budgeted fourth quarter BMC. The result will be added to the Company’s operating free cash flow for purposes of calculating achievement under this Plan; and

- (ii) In the event fourth quarter BMC is lower than the budgeted BMC price, the adjustment will be calculated as: (i) actual ending physical book inventory kilotonnes times (ii) budgeted fourth quarter BMC, reduced by actual fourth quarter BMC. The result will be deducted from the Company's operating free cash flow for purposes of calculating achievement under this Plan.
- (iii) Free Cash Flow Before Metal Price Lag may also include cash flows from working capital management activities and programs (including, without limitation, factoring of accounts receivable). For purposes of calculating achievement of Free Cash Flow Before Metal Price Lag under this Plan, any excess or shortfall of cash flow resulting from such working capital management activities or programs against plan will be disregarded.

(c) **Global Safety** is based on the metric of Days Away from Work (DAFW), which is based on a standard OSHA calculation that attempts to roughly convert DAFW to a rough percentage (utilizing 200,000 hours in the numerator to approximate 100 person-years) so that a 1.0 DAFW would indicate 1 DAFW case per 100 man-years.

In the case of a fatality at a Company location during fiscal 2020, select participants will receive no payout for the Global Safety measure.

(d) **Inventory Days** means Quarter-end inventory balance (in kt) divided by trailing quarter shipments (in kt) multiplied by 90. Inventory days will be assessed each quarter-end, and measured based on the variance between quarterly average of plan versus actuals.

(e) **Retirement** means as separation from the Company at 65 years of age or a combination of age and service greater than or equal to 65 with a minimum age of 55.

(f) **Change in Control** means the first to occur of any of the following events: (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control will not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity

or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or (iv) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" will be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions. For purposes of this Section, "beneficial ownership" will be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

8. **Interpretation.** Novelis will interpret and construe the terms and conditions of the plan in its sole discretion, including but not limited to all decisions regarding eligibility for, and the amount of benefits payable under, the Plan.
9. **No Right to Continued Service.** Nothing in the Plan confers upon any participant the right to continued employment or service with the Company or otherwise interfere with or restrict the right of Novelis or any affiliate to terminate the participant's employment or service for any reason.



August 22, 2006

CONFIDENTIAL PERSONAL INFORMATION

Mr. Nick Madden
Zurich, Switzerland

Dear Nick,

It is my pleasure to confirm the offer for the position of Vice President, Metal and Procurement at Novelis Inc. located in Atlanta, Georgia, USA reporting to me.

The terms and conditions of this assignment are as follows:

1. STARTING DATE AND DURATION

The effective date of your appointment is expected to be October 1, 2006, however it is contingent upon successful completion of U.S. immigration and work permit requirements, for you and your family. Ms. Mary Sundelin will initiate these procedures on your behalf. Mary is located in Mayfield Heights, Ohio and her telephone number is (440) 423-6893. This assignment is anticipated to be permanent.

2. COMPENSATION PACKAGE

During this assignment, your status will be that of a regular salaried employee of Novelis, Inc. in the United States.

Your compensation and benefits package is designed to provide you with a level of income and benefits which are similar to those of your peers in the United States in a similar position.

Should the nature of this assignment or the position itself change significantly, then certain parts of this letter may have to be discussed with you.



a) **Grade**

The job grade for this position is a 45.

b) **Base Salary**

Your starting base salary in the United States will be US \$260,000 per annum. Your salary will be administered in accordance with practices in the United States. Your next salary review will be April 1, 2007.

c) **Method of Salary Payment**

The entire amount of net income is disbursed by Novelis Corporation and deposited to your bank account in the United States, in US dollars.

3. SHORT TERM INCENTIVE PLAN (STIP)

You will continue to participate in the Short Term Incentive Plan (STIP) as administered in Novelis for job grade 45. The guideline bonus in 2006 for Job Grade 45 is 45% of base salary. Any award payable, for the period starting January 1, 2006 until your start date in the United States will be calculated on your European role. Any award payable from your transfer date to year end will be calculated on your U.S. role..

4. Long Term Incentive Plan (LTIP)

You will be eligible for participation in Novelis' LTI program. Novelis is in the process of developing a new plan for approval by shareholders in October.

5. Transfer Bonus



You will receive a one-time transfer bonus payment of US \$50,000 at the time of your transfer. This bonus will be paid in the United States and is subject to U.S. income tax withholdings.

6. PENSION PLAN, SOCIAL SECURITY AND OTHER EMPLOYEE BENEFITS

a) Pension Plan Membership

You will be eligible for the Novelis Pension Plan (US) and the Novelis Supplemental Retirement Benefits Plan. In addition, you will receive a pension supplement calculated on the basis of your service from the transfer date, up to a maximum of \$50,000 per year. The level of this supplement will increase at the rate of \$10,000 per year, commencing on the first anniversary of your transfer, calculated on a monthly basis, until it reaches the level of \$50,000 per year on your fifth anniversary from the transfer. A schedule that details your pension treatment is attached.

b) Social Security

You will join the Social Security Scheme in the United States.

c) Other Benefits

For the duration of the assignment you and your family will be eligible to participate in the following Novelis, Inc. benefit plans:

- Life Insurance Plan
- Employee Saving Plan
- Medical Plan
- Prescription Drug Plan
- Dental Plan
- Executive Physical Examination Program
- Short Term and Long Term Disability Plans
- Business Travel Accident Plan



7. Severance

In the event of your involuntary termination for reason other than cause, you will receive the benefits from the Novelis Corporation (US) severance policy applicable at the time. The company will consider your service for severance calculation purposes only as from your initial date of hire with Alcan - 21 years, 10 months service at time of transfer..

8. Change of Control

Novelis management is in the process of developing a change of control policy that will take effect January 7, 2007, the content of which and participant list is subject to approval by the Board of Directors. Management will be recommending to the Board that the VP Metal and Procurement position be covered by an individual change in control agreement.

For the interim period (October 1, 2006 through January 7, 2007), management will be recommending at the August 24 Board meeting that this position be included within a change of control policy designed by Alcan prior to the time of the spin-off. The only material change to the terms of that original Alcan program is the requirement for a change of control to occur from the existing ownership of Novelis.

9. RELOCATION

- a) Business class airfare for you and your family via the most direct route between Zurich and Atlanta, as well as reasonable expenses arising from travel, will be for Novelis' account.
- b) As part of your relocation to Atlanta, USA, you will be provided with assistance in administrative issues. Please contact Ken Grillo, Novelis Cleveland.
- c) You will be entitled to a relocation allowance on one month's base salary, payable in September on the basis of your current salary. Any federal, state and local income taxes assessed on this payment will be for Novelis' account.



- d) Novelis will be responsible for the cost of shipping your household goods and personal effects, as well as for the cost for a small air shipment of personal effects and soft furnishings (clothes, bed and bathroom linens, etc.) from Zurich to Atlanta.
- e) You may, upon arrival, reside in a temporary furnished apartment in the Atlanta area. The basic rental cost for the first month plus meals and incidentals for the first seven days will be for Novelis' account.

10. AUTOMOBILE

a) Zurich

If they are less than eight years old Novelis will establish a guaranteed sale price for your personal vehicle(s) based on published market resale value. Upon submission of appropriate documents, you will be reimbursed for any shortfall between sale price and actual price. The maximum reimbursement is limited to 15% of the guaranteed sale price(s). You are responsible for arranging and executing this sale before leaving the Zurich.

Novelis will pay for the shipment to the United States of the Porsche you currently own. Any regulatory issues, such as emissions, duty and taxes are on your account.

b) United States

In the USA, Novelis will provide you with a leased automobile according to the US car policy (Novelis' Leased Vehicle Program). Novelis will pay operating and maintenance costs for the vehicle. The personal use of a company provided vehicle is a taxable benefit to you. These taxes are for your account. Details of the program will be explained to you upon arrival.

11. FLEXPERKS

You will also be entitled to Flexperks Plan as provided to executive employees of Novelis in the United States. This plan provides \$7,000 per



year to provide financial counseling, tax preparation, and club membership.

12. HOUSING

a) Zurich

Novelis Corporation will assist with the cost of selling your house in Zurich in accordance with the Novelis Home Sale assistance program. Details of this program will be made available to you.

b) United States

Novelis Corporation will assist you with the cost of purchasing your house in the Atlanta area in accordance with the Novelis Home purchase assistance program.

13. VACATION

Any prior period vacation or leave entitlements you have accumulated in Zurich should be cleared before taking up this appointment. Your vacation will be a total of 25 days per year plus statutory and Company designated holidays. Your vacation entitlement will be governed by the Novelis Inc. vacation policy in the United States. Your prior service will be recognized in the U.S. for future vacation entitlements. The vacation year in the U.S. is administered on a calendar year basis. There is no carry-over from year to year.

14. HOME LEAVE TRAVEL COSTS

Atlanta has been designated as your Home Base. However, you and your Spouse will be entitled to one round-trip full-economy class airfare for travel between Atlanta and Europe by the most direct route, after the first 12-month period of your assignment in the United States. The cost of the airfare will be for Novelis' account. All other incidental expenses incurred during any home leave trip will be for your account. All further personal travel to Europe will be on your account.



15. PREPARATION OF INCOME TAX

It is strongly recommended that you take professional tax advice, both in Zurich and in the USA, prior to leaving and prior to making any major financial decisions arising from this transfer.

In the USA, you will be provided with the services of Ritchie Financial Group (c/o: Mr. Greg Ritchie, tel. 330-659-2000) for USA income tax return preparation. The cost of these services for one year will be for Novelis' account.

Should you require similar services in Zurich before and/or during the course of your assignment in the USA, we are prepared to make arrangements for appropriate consulting support. Please discuss this matter with Gottfried Weindl. The cost of the services which have come up due to the transfer will be for Novelis' account as well.

16. EDUCATION

The company will reimburse you for the cost of private school in Atlanta for any children in grades 1 through 12 as long as you are based in Atlanta. This benefit is subject to approval by the company for a schedule of schools. You will receive further details of this benefit.

17. CHANGE OF STATUS

In the event that the anticipated duration of this assignment or the position itself changes significantly from what is set out in this letter, then the affected terms and conditions will be re-discussed with you. This does not preclude the possibility that you may be offered another suitable position within the Novelis Group of Companies for your consideration.

18. REPATRIATION TO ZURICH

This transfer is considered a permanent assignment and relocation to the United States. There are no provisions in this offer for repatriation back to Europe.



19. CONTACTS

Your contact in Europe for assistance with your relocation is Gottfried Weindl, Zurich. Your contact in the US is Ken Grillo, Cleveland.

We hope that you find these terms satisfactory and would appreciate your signing and returning one copy of this letter to indicate your acceptance.

Yours sincerely,

Mrs. Martha Brooks
Chief Operating Officer

Accepted:

Nicholas Madden

Dated:

30 August 2006

File: 11168 Aug08/2006 DJH



July 29, 2016
Nicholas Madden

Dear Nicholas,

Your contributions to Novelis are very important. In recognition of this, the Company has put in place an enhancement to the FY2017 Long-Term Incentive Plan (LTIP), known as the "Bridge Award". The Bridge Award is intended to encourage you to remain with Novelis by supplementing you with a cash incentive while the new Novelis Performance Unit component of the FY2017 LTIP matures. The Bridge Award is in addition to your other compensation such as your base salary, annual bonus opportunity and long-term incentive opportunity.

You will receive three payments for the FY2017 Bridge Award in the total amount of \$ 100,000.

First Payment in December 2016	\$ 30,000
Second Payment in December 2017	\$ 30,000
Third Payment in December 2018	\$ 40,000

Because this opportunity is designed to enhance our LTIP as a retention incentive, in the event that you voluntarily terminate your employment prior to December 31, 2019, or are terminated for cause, you will be required to repay the gross amount of any payments made under the Bridge plan in the previous 12 months and you will not be entitled to any other payments thereafter. If you are terminated involuntarily without cause, any unpaid cash installments will be immediately cancelled, but you will not be required to repay any cash payments you have received.

Your acceptance of any payments under this award shall constitute your acceptance of the terms and conditions set forth above.

I am very pleased that we are able to offer you this opportunity and I look forward to your continued support as a key member of the team as we focus on building an even more successful Novelis.

Regards,

A handwritten signature in black ink, appearing to read "S. Fisher".

Steve Fisher
President and Chief Executive Officer
Novelis Inc.

CHANGE IN CONTROL AGREEMENT

This Agreement, effective as of this first day of April 2016, is entered into by and between Novelis Inc., a Canadian corporation (the "Company") and Nicholas Madden ("Executive").

WHEREAS, the Company's Board of Directors has determined that it is in the best interest of the Company's shareholders to reinforce and encourage the continued attention and dedication of members of the Company's management, including Executive, to their assigned duties without distraction in potentially disturbing circumstances arising from the possibility of a Change in Control; and

WHEREAS, this Agreement sets forth the payments and other benefits to which Executive will be entitled upon certain conditions if Executive's employment with the Company terminates.

NOW, THEREFORE, in consideration of the premises and mutual covenants and agreements set forth below, it is hereby agreed as follows:

1. Term. This Agreement shall terminate, except to the extent that any obligation of the Company hereunder remains unpaid as of such time, at midnight on June 30, 2018, unless a Change in Control occurs on or before such date, in which case this Agreement shall terminate or twenty-four (24) months following the date of such Change in Control.

2. Payment upon Termination of Employment.

(a) Events Giving Rise to Benefits. Except as provided in Section 2(d) (Certain Reductions in Payment) below, Executive shall be entitled to payments and other benefits as set forth in Sections 2(b) and 2(c) if the Company shall terminate Executive's employment other than for Cause, or Executive shall terminate his or her employment for Good Reason, in either case within twenty-four (24) months after a Change in Control. Executive's right to receive compensation and benefits under this Agreement shall be subject to the terms and conditions of the Company's release from and waiver by Executive of claims, non-compete agreement and non-solicitation agreement for executive employees. No payments or benefits shall be paid pursuant to this Agreement unless, on or before the thirtieth (30th) day following the effective date of Executive's termination of employment, Executive delivers to the Company an executed release and waiver of claims, non-compete agreement and non-solicitation agreement and all revocation periods thereunder shall have expired. The release shall not release Executive's right to receive indemnification and defense from the Company for any claims arising out of the performance of Executive's duties on behalf of the Company. Termination of employment due to Cause, Death, Disability or Retirement at any time before or after a Change in Control shall not give rise to any rights to compensation or benefits under this Agreement.

(b) Severance Pay. In accordance with Section 2(a) above, the Company shall pay a lump sum cash amount equal to:
[A x (B + C)] - D, where

"A" equals a multiplier of 2.0:

"B" equals Executive's annual base salary (including all amounts of such base salary that are voluntarily deferred under any qualified and non-qualified plans of the Company) determined at the rate in effect as of the date of such termination of employment;

"C" equals Executive's target short term incentive opportunity for the fiscal year in which such Change in Control occurs; and

"D" equals the amount of severance payments, if any, paid or payable to Executive by the Company other than pursuant to this Agreement; it being expressly understood that the purpose of this deduction is to avoid any duplication of payments to Executive.

Except to the extent payment is required to be delayed pursuant to Section 15 below, payment shall be made by the thirtieth (30th) day following the effective date of the Executive's termination of employment if such termination occurs after a Change in Control.

(c) Other Benefits.

- (i) If Executive is not eligible for retiree medical benefits and is covered under the Company's group health plan at the time of the termination of employment, the Company shall pay an additional lump sum cash amount for the purpose of assisting Executive with the cost of post-employment medical continuation coverage equal to: $(C \times M) / (1 - T)$, where

"C" equals the full monthly COBRA premium charged for coverage under the Company's group medical plan at Executive's then current level of coverage;

"M" equals twelve (12) months; and

"T" equals an assumed tax rate of 40%

Except to the extent payment is required to be delayed pursuant to Section 15 below, payment shall be made by the thirtieth (30th) day following the effective date of the Executive's termination of employment if such termination occurs after a Change in Control.

- (ii) To the extent available, Executive shall be entitled to continue coverage under the Company's group life plan for a period of twelve (12) months at Executive's pre-termination level of coverage.
- (iii) Executive shall be entitled to twelve (12) months of additional credit for benefit accrual and contribution allocation purposes including credit for age, service and earnings pro rated over

twelve (12) months under the Company's tax-qualified and non-qualified pension, savings or other retirement plans; provided that if applicable provisions of the Code prevent payment in respect of such credit under the Company's tax-qualified plans, such payments shall be made under the Company's non-qualified plans.

- (iv) To the extent Executive is not already fully vested under the Company's tax-qualified and non-qualified retirement pension, savings and other retirement plans, Executive shall become 100% vested under such plans; provided that if applicable provisions of the Code prevent accelerated vesting under the Company's tax-qualified plans, an equivalent benefit shall be payable under the Company's non-qualified plans.

- (d) Certain Reductions in Payment. Notwithstanding the foregoing provisions of this Section 2 or any other provision in this Agreement to the contrary, in the event it is determined that any payment or distribution in the nature of compensation (within the meaning of Section 280G(b)(2) of the Code) to or for the benefit of Executive, whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise (the "Change in Control Payment"), would constitute an "excess parachute payment" within the meaning of Section 280G of the Code, then the Company shall pay to Executive whichever of the following gives Executive the highest net after-tax amount (after taking into account all applicable federal, state, local and social security taxes): (i) the Change in Control Payment, or (ii) the next highest amount that would not result in the imposition of excise tax on Executive under Section 4999 of the Code. Any required reduction in the Change in Control Payment pursuant to the foregoing shall be accomplished by reducing the amount of severance payment payable pursuant to Section 2(b) of this Agreement. All determinations to be made under this Section 2(d) shall be made by an independent public accounting firm selected by the Company immediately prior to a Change in Control (the "Accounting Firm"), which shall provide its determinations and any supporting calculations both to the Company and Executive within ten (10) days of a Change in Control. Any such determination by the Accounting Firm shall be binding upon the Company and Executive. All fees and expenses of the Accounting Firm in performing the determinations referred to in this Section 2(d) shall be borne solely by the Company.

3. Definitions. Except as otherwise provided under this Agreement, the following capitalized terms used within this Agreement shall have the meaning set forth below:

- (a) "Cause" means only (i) Executive's conviction of any crime (whether or not involving the Company) constituting a felony in the applicable jurisdiction; (ii) willful and material violation of the Company's policies, including, but not limited to those relating to sexual harassment and confidential information; (iii) willful misconduct in the performance of Executive's duties for the Company; or (iv) willful and repeated failure or

refusal to perform the Executive's material duties and responsibilities which is not remedied within ten (10) days after written demand from the Chief Executive Officer to remedy such failure or refusal.

(b) "Change in Control" means the first to occur of any of the following events:

- (i) any person or entity (excluding any person or entity affiliated with the Aditya Birla Group) is or becomes the beneficial owner, directly or indirectly through any parent entity of the Company or otherwise, of securities of the Company representing 35% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities (the "Value or Vote of the Company"); provided, however, that a Change in Control shall not be deemed to have occurred in the event that (A) any person or entity becomes the beneficial owner of securities representing 50% or less of the Value or Vote of the Company through (i) an initial public offering, (ii) a secondary offering, (iii) a private placement of securities, (iv) a share exchange transaction, or (v) any similar share purchase transaction in which the Company or any of its affiliates issues securities (any such transaction, a "Share Issuance Transaction"); and (B) a person or entity's beneficial ownership interest in the Value or Vote of the Company is diluted solely as a result of any Share Issuance Transaction; or
- (ii) the majority of the members of the Board of Directors of the Company is replaced during any 12-month period by directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election; or
- (iii) the consummation of a merger or consolidation of the Company with any other entity not affiliated with the Aditya Birla Group, other than (a) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior to such merger or consolidation continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or any parent thereof), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company, 50% or more of the combined voting power of the voting securities of the Company or such surviving entity or any parent thereof outstanding immediately after such merger or consolidation, or (b) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) in which no person or entity is or becomes the beneficial owner, directly or indirectly, of securities of the Company (not including in the securities beneficially owned by such person or entity any securities acquired directly from the Company or its affiliates, other than in connection with the acquisition by the Company or its affiliates of

a business) representing 50% or more of either the then outstanding shares of common stock of the Company or the combined voting power of the Company's then outstanding securities; or

- (iv) the stockholders of the Company approve a plan of complete liquidation or dissolution; or
- (v) the sale or disposition of all or substantially all of the Company's assets, other than a sale or disposition by the Company of all or substantially all of its assets to a member of the Aditya Birla Group.

Notwithstanding the foregoing, no "Change in Control" shall be deemed to have occurred if there is consummated any transaction or series of integrated transactions immediately following which the record holders of the common stock of the Company immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

For purposes of this Section, "beneficial ownership" shall be determined in accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended.

- (c) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code shall include such section and any comparable section or sections of any future legislation that amends, supplements or supersedes such section.
- (d) "Disability" means Executive is permanently and totally disabled and unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or which has lasted or can be expected to last for a continuous period of twelve months.
- (e) "Good Reason" means any of the following if it shall occur without Executive's express written consent: (i) a material reduction in Executive's position, duties, reporting relationships, responsibilities, authority, or status with the Company; (ii) a material reduction in Executive's base salary and target short term and long term incentive opportunities in effect on the date hereof or as the same may be increased from time to time during the term of this Agreement; (iii) any requirement that Executive relocate more than fifty (50) miles from the area in which Executive regularly performs his or her duties for the Company, except for required travel by Executive on the Company's business to an extent substantially consistent with Executive's normal business travel obligations; or (iv) any material failure of the Company to comply with its obligations under this Agreement. Executive must provide notice to the Company of the existence of any of the foregoing conditions

within thirty (30) days of the initial existence of any such condition, and the Company shall have a period of thirty (30) days following receipt of such notice to cure any such condition, without being required to pay the amounts and other benefits contemplated by this Agreement.

- (f) "Retirement" means Executive's voluntary retirement on or after qualifying for early or normal retirement under the applicable Company pension plan in which such Executive participates.

4. Notice of Termination. Any termination of Executive's employment for any reason shall take effect pursuant to a written notice of termination to the other party. Such notice must set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of Executive's employment pursuant to this Agreement. No such purported termination of employment shall be effective without such written notice of termination conforming to the requirements of this Section.

5. No Obligation to Mitigate Damages: No Effect on Other Contractual Rights.

- (a) Executive shall not be required to mitigate damages or the amount of any payment provided for under this Agreement by seeking other employment or otherwise, nor shall the amount of any payment provided for under this Agreement be reduced by any compensation earned by Executive as the result of employment by another employer after Executive's termination of employment, or otherwise.
- (b) The provisions of this Agreement, and any payment provided for hereunder, shall not reduce any amounts otherwise payable, or in any way diminish Executive's existing rights, or rights which would accrue solely as a result of the passage of time, under any employee benefit plan or arrangement providing retirement benefits or health, life, disability or similar welfare benefits.

6. Successor to the Company.

- (a) The Company will require any successor or assign (whether direct or indirect, by purchase, merger, consolidation or otherwise) to all or substantially all of the business and/or assets of the Company to absolutely and unconditionally assume and agree to perform this Agreement in the same manner and to the same extent that the Company would be required to perform it if no such succession or assignment had taken place. Any failure of the Company to obtain such assumption and agreement prior to the effectiveness of any such succession or assignment shall entitle Executive to terminate Executive's employment for Good Reason.
- (b) This Agreement shall inure to the benefit of and be enforceable by Executive's personal and legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If Executive should die while any amounts are still payable to him or her hereunder, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to Executive's devisee,

legatee, or other designee, or if there be no such designee, to Executive's estate. The services to be provided by Executive to the Company under this Agreement are personal and are not delegable or assignable.

7. Notice. Notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered or mailed by certified or registered mail, return receipt requested, postage prepaid, as follows:

If to the Company:

Novelis Inc.
Attn: Senior Vice President, General Counsel
3560 Lenox Rd.
Suite 2000
Atlanta, Georgia 30326

If to Executive, to the address of Executive on the books of the Company

Another address may be used if a party has furnished a different address to the other party in writing in accordance herewith, except that notices of change of address shall be effective only upon receipt.

8. Sole Agreement. This Agreement (together with any signed employment agreement) represents the entire agreement between the parties with respect to the matters contemplated herein. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Agreement.

9. Validity. The invalidity or unenforceability of any provisions of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

10. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original but all of which together will constitute one and the same instrument.

11. Legal Fees and Expenses. The Company shall pay all legal fees and expenses which Executive reasonably may incur as a result of the Company's contesting the validity, enforceability or Executive's interpretation of, or determinations under, this Agreement except to the extent Executive's position is frivolous or carried out in bad faith.

12. Confidential Information. Executive agrees not to disclose during the term hereof or thereafter any of the Company's confidential or trade secret information, except as required by law. Executive recognizes that Executive shall be employed in a sensitive position in which, as a result of a relationship of trust and confidence, Executive will have access to trade secrets and other highly confidential and sensitive information.

Executive further recognizes that the knowledge and information acquired by Executive concerning the Company's materials regarding employer/employee contracts, customers, pricing schedules, advertising, manuals, systems, procedures and forms represent the most vital part of the Company's business and constitute by their very nature, trade secrets and

confidential knowledge and information. Executive hereby stipulates and agrees that all such information and materials shall be considered trade secrets and confidential information. If it is at any time determined that any of the information or materials identified in this Section are, in whole or in part, not entitled to protection as trade secrets, they shall nevertheless be considered and treated as confidential information in the same manner as trade secrets, to the maximum extent permitted by law. Executive further agrees that all such trade secrets or other confidential information, and any copy, extract or summary thereof, whether originated or prepared by or for Executive or otherwise coming into Executive's knowledge, possession, custody, or control, shall be and remain the exclusive property of the Company.

13. Withholding. Taxes resulting from any benefits received under this Agreement are for the account of the Executive. The Company may withhold from any benefits payable under this Agreement all applicable taxes and other amounts as shall be required pursuant to any law or governmental regulation or ruling.

14. Non-Binding Arbitration; Claim Venue. Any claim or controversy arising out of or relating to this Agreement or any breach thereof shall be subject to non-binding arbitration before either party may seek any other legal recourse. Any such arbitration shall take place in Atlanta, Georgia, in accordance with the rules of the American Arbitration Association. Each party further submits to the exclusive jurisdiction of the Georgia state courts and the United States District Court for the Middle District of Georgia (Atlanta, Georgia) and irrevocably waives, to the fullest extent permitted by law, any objections that either party may now or hereafter have to the aforesaid venue, including without limitation any claim that any such proceeding brought in either such court has been brought in an inconvenient forum, provided however, this provision shall not limit the ability of either party to enforce the other provisions of this Section.

15. Code Section 409A. To the extent applicable, this Agreement shall be interpreted in accordance with Section 409A of the Code and the applicable U.S. Treasury regulations and other interpretative guidance issued there under, including without limitation any regulations or other guidance that may be issued after the effective date of this Agreement. For purposes of determining whether any payment made pursuant to this Agreement results in a "deferral of compensation" within the meaning of Treasury Regulation §1.409A-1(b), the Company shall maximize the exemptions described in such section, as applicable. Notwithstanding any provision of the Agreement to the contrary, the Company may adopt such amendments to the Agreement or adopt other policies and procedures, or take any other actions that the Company determines is necessary or appropriate to exempt the Agreement from Section 409A and/or preserve the intended tax treatment of the benefits provided hereunder, or to comply with the requirements of Section 409A and related U.S. Treasury guidance. For purposes of conforming this Agreement to Section 409A of the Code, any reference to termination of employment, severance from service or similar terms shall be interpreted and construed to have the same meaning of "separation from service" as defined in Treasury Regulation §1.409A-1(h) (without giving effect to any elective provisions that may be available under such definition) and all payments and benefits under this Agreement that would constitute non-exempt deferred compensation for purposes of Section 409A of the Code and that would otherwise be payable hereunder by reason of Executive's termination of employment, will not be payable to Executive unless the circumstances giving rise to such termination of employment constitute a Section 409A-compliant separation from service. If the preceding sentence prevents the payment or distribution of any amount or benefit, such payment or distribution shall be made on the date, if any, on which an event occurs that constitutes a Section 409A-compliant separation from service. If Executive is a specified employee (as defined in Treasury Regulation §1.409A-1(i)) upon separation from service, then payment of any Section 409A deferred compensation

amount shall be delayed for a period of six months to the extent required by Section 409A and shall be paid in a lump sum on the first payroll payment date following expiration of such six month period. If Executive is entitled to be paid or reimbursed for any taxable expenses under this Agreement, and such payments or reimbursements are includible in Executive's U.S. federal gross taxable income, the amount of such expenses reimbursable in any one taxable year of Executive shall not affect the amount reimbursable in any other taxable year, and the reimbursement of an eligible expense must be made no later than December 31 of the year after the year in which the expense was incurred. No right of Executive to reimbursement of expenses under this Agreement shall be subject to liquidation or exchange for another benefit.

16. Attachment. Except as required by law, the right to receive payments under this Agreement shall not be subject to anticipation, sale, encumbrance, charge, levy, or similar process or assignment by operation of law.

17. Waivers. Any waiver by a party or any breach of this Agreement by another party shall not be construed as a continuing waiver or as consent to any subsequent breach by the other party. Except as otherwise expressly set forth herein, no failure on the part of any party hereto to exercise and no delay in exercising any right, power or remedy hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any right, power or remedy hereunder preclude any other or further exercise thereof or the exercise of any other right, power or remedy.

18. Headings. The headings of the sections of this Agreement have been inserted for convenience of reference only and shall in no way restrict or modify any of the terms or provisions hereof.

19. Governing Law. This Agreement shall be governed and construed under the laws of the State of Georgia.

THIS AGREEMENT CONTAINS AN ARBITRATION PROVISION WHICH MAY BE ENFORCED BY THE PARTIES.


NOVELIS INC.

Name: Leslie J. Parrette, Jr.
Senior Vice President and General Counsel

Signature: 

EXECUTIVE

Name: Nicholas Madden

Signature: 

Date: April 13, 2016

**AMENDMENT TO EXTEND CHANGE IN CONTROL AGREEMENT**

This Amendment is entered into by and between Novelis Inc., a Canadian corporation (the "Company") and Nicholas Madden ("Executive") effective as of July 1, 2018.

WHEREAS, the Company and Executive are parties to a Change in Control Agreement effective as of April 1, 2016 (the "Original Agreement"); and

WHEREAS, the Original Agreement is set to expire pursuant to its term effective June 30, 2018, and the Company and Executive desire to extend the Original Agreement for an additional two year term.

NOW THEREFORE, effective July 1, 2018, Section 1 of the Original Agreement is modified to read as follows:

Term. This Agreement shall terminate, except to the extent that any obligation of the Company hereunder remains unpaid as of such time, at midnight on June 30, 2020, unless a Change in Control occurs on or before such date, in which case this Agreement shall terminate or twenty-four (24) months following the date of such Change in Control.

In all other respects, the Original Agreement shall remain in effect.

IN WITNESS WHEREOF, the parties have caused this Amendment to be adopted effective as of July 1, 2018. This Amendment may be executed in counterparts.

Novelis Inc.

A handwritten signature in blue ink, appearing to read "H.R. Shashikant", written over a horizontal line.

By: H.R. Shashikant

Title: SVP & Chief Human Resources Officer

Date: 6/29/2018

Nicholas Madden

A handwritten signature in black ink, appearing to read "Nicholas Madden", written over a horizontal line.

Date: 6/29/2018.

EXHIBIT 21.1

List of Subsidiaries of Novelis Inc.

Name of Entity	Jurisdiction of Organization
Novelis Corporation	Texas, United States
Novelis de Mexico, S.A. de C.V.	Mexico
Novelis Global Employment Organization, Inc.	Delaware, United States
Logan Aluminum Inc.	Delaware, United States
Novelis South America Holdings LLC	Delaware, United States
Novelis Acquisitions LLC	Delaware, United States
Novelis Holdings Inc.	Delaware, United States
Novelis Services (North America) Inc.	Delaware, United States
Novelis Services (Europe) Inc.	Delaware, United States
Novelis AG	Switzerland
Novelis Switzerland S.A.	Switzerland
AluInfra Services SA	Switzerland
Novelis Italia SpA	Italy
Novelis Europe Holdings Limited	United Kingdom
Novelis UK Ltd	United Kingdom
Novelis Services Limited	United Kingdom
Novelis Aluminium Holding Unlimited Company	Ireland
Novelis Deutschland GmbH	Germany
Aluminium Norf GmbH	Germany
Novelis Aluminium Beteiligungs GmbH	Germany
Deutsche Aluminium Verpackung Recycling GmbH	Germany
Novelis Sheet Ingot GmbH	Germany
France Aluminium Recyclage S.A.	France
Novelis Laminés France S.A.S.	France
Novelis PAE S.A.S.	France
4260848 Canada Inc.	Canada
4260856 Canada Inc.	Canada
8018227 Canada Inc.	Canada
Novelis Korea Limited	South Korea
Ulsan Aluminum Ltd.	South Korea

Novelis (China) Aluminum Products Co., Ltd.	China
Novelis (Shanghai) Aluminum Trading Co., Ltd.	China
Novelis Vietnam Company Limited	Vietnam
Novelis MEA Ltd.	Dubai, UAE
Novelis do Brasil Ltda.	Brazil
Brecha Energetica Ltda	Brazil
Novelis (India) Infotech Ltd.	India

Certification

I, Steven Fisher, certify that:

- 1 I have reviewed this Annual Report on Form 10-K of Novelis Inc. (Novelis);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on my most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Steven Fisher

Steven Fisher

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 8, 2019

Certification

I, Devinder Ahuja, certify that:

- 1 I have reviewed this Annual Report on Form 10-K of Novelis Inc. (Novelis);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Devinder Ahuja

Devinder Ahuja
Chief Financial Officer
(Principal Financial Officer)

Date: May 8, 2019

**Certification Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Novelis Inc. (Novelis), hereby certifies that Novelis' Annual Report on Form 10-K for the period ended March 31, 2019 (Report) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Novelis.

/s/ Steven Fisher

Steven Fisher

President and Chief Executive Officer

(Principal Executive Officer)

Date: May 8, 2019

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of this Report.

**Certification Pursuant to 18 U.S.C. Section 1350 as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002**

Pursuant to 18 U.S.C. Section 1350, the undersigned officer of Novelis Inc. (Novelis), hereby certifies that Novelis' Annual Report on Form 10-K for the period ended March 31, 2019 (Report) fully complies with the requirements of Section 13(a) or Section 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Novelis.

/s/ Devinder Ahuja

Devinder Ahuja
Chief Financial Officer
(Principal Financial Officer)

Date: May 8, 2019

The foregoing certification is being furnished solely pursuant to 18 U.S.C. Section 1350 and is not being filed as part of this Report.