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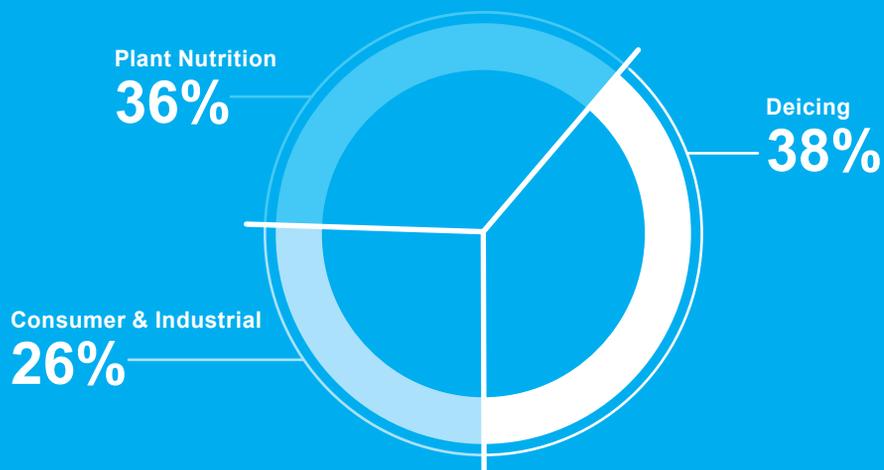


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# ESSENTIAL ELEMENTS

2018 demonstrated the attractive underlying fundamentals of our core businesses and showed that we have the key building blocks in place—in our assets and our geographic presence—to drive sustainable growth. Delivering on our full potential means we must focus on the essentials of our people, products, customers and commitments.

## 2018 GROSS SALES BY MARKET



## CASH FLOW FROM OPERATIONS

(dollars in millions)



## DEAR SHAREHOLDERS,

In 2018, Compass Minerals achieved full-year revenue growth of 9 percent with top-line growth achieved in each of our segments compared to 2017. Our Salt segment benefited from a return to more typical winter weather in our key markets in North America and the U.K. during the first half of the year, which resulted in strong price increases for the second half of the year and full-year revenue growth of 12 percent. Our 2018 Plant Nutrition North America segment revenue increased 11 percent from 2017 results and our Plant Nutrition South America segment generated 4 percent revenue growth as healthy demand for our high-value plant nutrients continued. Excluding the impact of foreign currency, we generated 22 percent top-line growth in our Plant Nutrition South America segment.

A reduction in Salt segment earnings due to lower production rates at our Goderich mine challenged our 2018 consolidated operating earnings. This reduction was caused by the combination of a strike and a slower than expected ramp-up of our continuous mining system. These issues increased our Salt costs and reduced our expected highway deicing sales volumes for the 2018-2019 winter season. We believe these are short-term challenges stemming from this important transition to a safer, more environmentally friendly and efficient mining process. I am pleased to report that production rates began improving late in 2018, and we believe we are poised to achieve more optimal production in 2019.

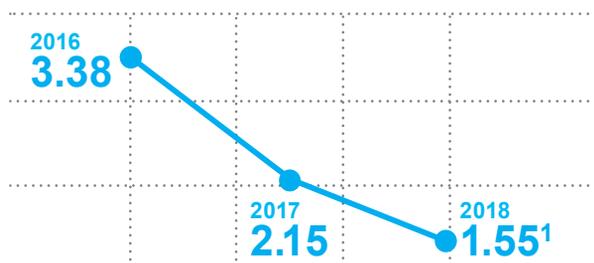
### 30% increase in 2018 cash flow from operations

Despite these challenges, we delivered almost \$191 million in cash flow from operations, a 30 percent increase from 2017. We also exceeded our free cash flow target and maintained our dividend. These achievements reflect the strong cash generation capability of Compass Minerals. As we move forward into 2019, our focus will be on the essentials—our people, products, customers and commitments, all of which we believe will drive better execution for our company and increased value for our shareholders.

## SAFETY DATA

Safety is an important part of our focus on our people. In 2018, our TCIR declined for the second year in a row, while our Severity Index increased slightly. Our ultimate goal is zero injuries and we will relentlessly pursue a strong safety culture to reach this goal.

### Total Case Incident Rate (TCIR)



<sup>1</sup> First year to include Brazil operations in safety data

## OUR PEOPLE

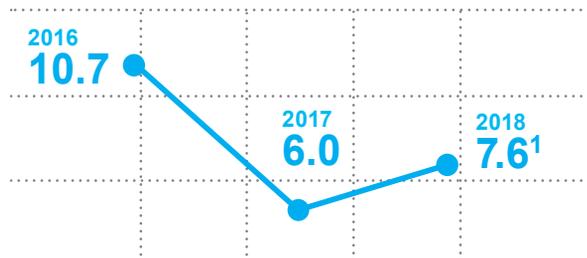
For our company to be successful, we must support and invest in our people. They are essential to our ability to produce our products, serve our customers and innovate to capture emerging opportunities. The men and women of Compass Minerals are key to achieving operational excellence.

Safety is an important aspect of our commitment to our people. We also recognize that safety metrics are leading indicators of our progress toward operational excellence. In 2018, we continued to execute our ongoing Environmental, Health and Safety (EHS) strategy by enhancing our safety culture and strengthening our health and safety management systems. Our ongoing diligence and focus on mitigating significant risks helped drive an improvement in our 2018 total case injury rate, which declined 34% from 2017 results. Although we experienced a slight increase in the overall severity of injury cases in 2018, we anticipate additional improvement as we further integrate our Brazilian operations into our safety and environmental management systems.

In addition to safety, ensuring our employees are engaged, have development opportunities and are part of an inclusive and diverse culture is critical to our success. We took several important steps in 2018 toward these objectives:

- Conducted a company-wide Employee Engagement Survey to identify actions to improve goal alignment, communications and community building.
- Upgraded our internship programs in North America and Brazil, providing improved access to a diverse talent pool.
- Introduced Compass Minerals Academy to expand online learning access with over 100 learning modules. Our employees completed more than 1,755 courses during 2018.

### Severity Index (SI)



## OUR PRODUCTS

One of the characteristics of Compass Minerals that has always impressed me as a Board member and now as interim CEO is the essential nature of the products we sell. Our products provide a disproportionate value to the end-user compared to their cost. These products include rock salt for highway deicing, which remains the most economical means of clearing roads during icy winter weather, and specialty plant nutrients, which represent a small portion of a grower's input cost, yet deliver very attractive value in terms of yield and quality. The essential and non-discretionary nature of many of these products means that our sales are less impacted by economic cycles, which has served us well over recent years.

Because of their essential quality, our ability to produce these products reliably and efficiently is critical to our long-term success and has been an important focus of our capital investments over the last four years. These investments have included the relining of two of our three mine shafts in Goderich and the transition of the mine to a continuous mining and haulage system. Once operating at targeted rates, we expect this system to improve our profitability and help us consistently meet customers' needs for highway deicing salt.

We have also invested in our unique sulfate of potash (SOP) production facility in Utah to expand and improve production, and we had a record year for our low-cost, pond-based SOP production at this site. As the only producer of SOP in North America, this expansion has been an important component of improving our position in the market as the supplier of choice for growers of specialty crops.

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## 9% 2018 REVENUE GROWTH

Top-line growth achieved in all segments

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In Brazil, our business also demonstrated strong growth as we consistently continue to produce innovative specialty nutrients of consistent high quality. In 2018, our Plant Nutrition South America segment captured more sales as a result of favorable grower economics in Brazil and increased adoption of our attractive portfolio of products. With the increases achieved in revenue and earnings in local currency, this segment is beginning to deliver the outcomes predicted when we fully acquired Produquímica in 2016.

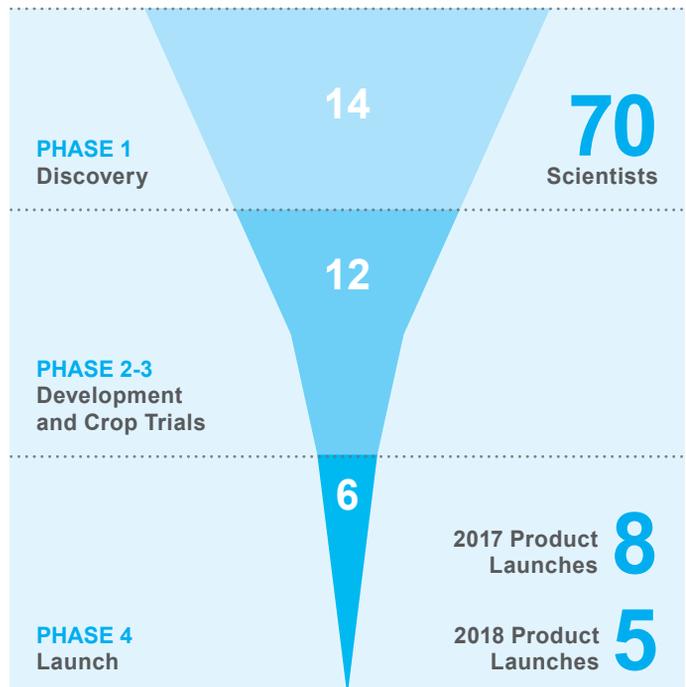
## OUR CUSTOMERS

At Compass Minerals, we know our ability to safely serve customers' needs where and when it matters is essential for success. Our customers' needs are often seasonally driven and time sensitive. From a soybean farmer in Brazil to a road maintenance supervisor in Quebec to an almond grower in California, our customers demand and deserve timely delivery and consistent, quality product.

We continually refine and improve our distribution networks and logistics to reach our customers in an efficient and timely fashion. Our customers also benefit from our long history of innovation, including our unique document storage business that we opened in 2003 in previously mined areas of our U.K. salt mine. Today, this business, called DeepStore, houses more than 1 million archival assets and documents. DeepStore provides services to a variety of customers, from the British National Archives to Oxford University's Bodleian Library to the Royal College of Music to a variety of other museums, law firms, architectural firms and others who seek to take advantage of the optimal environmental conditions and security that DeepStore provides.

Our commitment to innovation is clear in our continual work to maximize the potential of product development, particularly for our specialty plant nutrients, through our innovation centers in North and South America. These innovation centers feature 70 multidisciplinary scientists who pursue our data-driven advancement and product launch strategy. In 2018, we had 32 active pipeline products in a variety of phases, including five product launches.

## 32 ACTIVE PLANT NUTRITION PIPELINE PROJECTS IN 2018



## OUR COMMITMENTS

Last, but most essential of all, is our focus on delivering on our commitments. In addition to a safe work environment, a foundational commitment for us is to generate solid returns on our capital investments. This includes optimizing our investments at our Goderich mine to improve our production to meet demand and drive efficiencies. This also includes growing into our available production capacity for SOP and specialty plant nutrients in both North and South America.

We are also dedicated to being a responsible steward of the assets entrusted to our care. This dedication extends across our entire value chain, including manufacturing, distribution and product use. This is why we continue to deepen our focus on sustainability through transparency and accountability as demonstrated in the establishment of environmental targets and annual reporting on our sustainability strategy and progress. In 2018, we launched an environmental awareness campaign that touches our employees as well as our customers and communities. This focus, along with our commitment to safety, is core to our efforts to be an employer of choice, a neighbor of choice and a supplier of choice.

Finally, we are committed to our shareholders. We know 2018 had its challenges, but we also know we have the pieces in place to generate strong, sustainable growth into the future. By focusing on the essentials and delivering on our commitments, we believe we can drive improved value for shareholders. We look forward to updating you on our progress.

Sincerely yours,



**Richard S. Grant**

Chairman of the Board, Interim President and Chief Executive Officer

March 11, 2019



# FINANCIAL RESULTS

(dollars in millions except per-share data)

	2016	2017	2018
Revenue	\$1,138.0	\$1,364.4	\$1,493.6
Operating earnings	\$174.6	\$159.2	\$130.3
Adjusted operating earnings*	\$186.1	\$163.5	\$135.4
Adjusted operating earning margin	16%	12%	9%
Net Earnings	\$162.7	\$42.7	\$68.8
Net earnings, excluding special items*	\$111.2	\$93.3	\$65.8
Diluted earnings per share	\$4.79	\$1.25	\$2.02
Diluted earnings per share, excluding special items*	\$3.27	\$2.75	\$1.93
Dividends per share	\$2.78	\$2.88	\$2.88
Cash Flow from operations	\$167.3	\$146.9	\$190.7

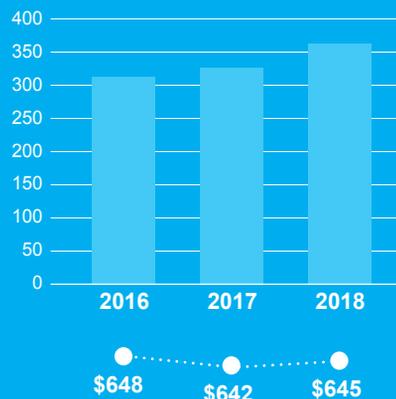
\*Non-GAAP measures. A reconciliation to GAAP measures are provided on the last page.

## PRICE AND VOLUME TRENDS BY SEGMENT

### Salt



### Plant Nutrition North America



### Plant Nutrition South America



●●● Average price per ton

■ Highway deicing sales volumes (Thousands of tons)

■ Consumer & Industrial sales volumes (Thousands of tons)

●●● Average price per ton

■ Sales volumes (Thousands of tons)

●●● Average price per ton (In Brazilian Reals)

■ Agriculture productivity sales volumes (Thousands of tons)

■ Chemical solutions sales volumes (Thousands of tons)

United States  
Securities and Exchange Commission  
Washington, D.C. 20549

**FORM 10-K**

(MARK ONE)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2018

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 001-31921



**Compass Minerals International, Inc.**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of incorporation or organization)

36-3972986  
(I.R.S. Employer Identification No.)

9900 West 109<sup>th</sup> Street, Suite 100  
Overland Park, Kansas  
(Address of principal executive offices)

66210  
(Zip Code)

Registrant's telephone number, including area code:  
(913) 344-9200

Securities registered pursuant to Section 12(b) of the Act:

Title of each class  
Common stock, par value \$0.01 per share

Name of each exchange on which registered  
New York Stock Exchange

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. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  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 Securities Exchange Act of 1934 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

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 (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes  No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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.

Large accelerated filer

Accelerated filer

Emerging growth company

Non-accelerated filer

Smaller reporting 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

As of June 30, 2018, the aggregate market value of the registrant's common stock held by non-affiliates of the registrant was \$2,225,660,644, based on the closing sale price of \$65.75 per share, as reported on the New York Stock Exchange.

The number of shares outstanding of the registrant's \$0.01 par value common stock at February 25, 2019 was 33,873,836 shares.

**DOCUMENTS INCORPORATED BY REFERENCE**

Document  
Portions of the Proxy Statement for the Annual Meeting of Stockholders to be held May 9, 2019

Parts into which Incorporated  
Part III, Items 10, 11, 12, 13 and 14

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**PART I****CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS**

Certain statements in this annual report on Form 10-K (this “report”), including without limitation our or management’s beliefs, expectations or opinions; statements regarding future events or future financial performance; our plans, objectives and strategies; our outlook, including expected sales volumes and EBITDA; existing or potential capital expenditures and investments, including at our Goderich mine and our Utah facility; the industry and our competition; projected sources of cash flow; potential legal liability; proposed legislation and regulatory action; the seasonal distribution of working capital requirements; our reinvestment of foreign earnings outside the U.S.; repatriation of foreign earnings to the U.S.; our ability to optimize cash accessibility and minimize tax expense; the impact of the U.S. Tax Cuts and Jobs Act; our debt service requirements; our liquidity needs; outcomes of matters with taxing authorities; and the seasonality of our business, are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are those that predict or describe future events or trends and that do not relate solely to historical matters. We use words such as “may,” “would,” “could,” “should,” “will,” “likely,” “expect,” “anticipate,” “believe,” “intend,” “plan,” “forecast,” “outlook,” “project,” “estimate” and similar expressions suggesting future outcomes or events to identify forward-looking statements or forward-looking information. These statements are based on our current expectations and involve risks and uncertainties that could cause our actual results to differ materially. In evaluating these statements, you should carefully consider various risks, uncertainties and factors including, but not limited to, those listed under “Risk Factors” and elsewhere in this report. Forward-looking statements are only predictions and are subject to certain risks and uncertainties that may cause our actual results to differ materially from the forward-looking statements expressed or implied in this report as a result of factors, risks, and uncertainties, over many of which we do not have control.

Although we believe that the expectations reflected in the forward-looking statements are reasonable as of the date of this report, we cannot guarantee future results, levels of activity, performance or achievements. We do not undertake, and hereby disclaim any obligation or duty, unless otherwise required to do so by applicable securities laws, to update any forward-looking statement after the date of this report regardless of any new information, future events or other factors. The inclusion of any statement in this report does not constitute our admission that the events or circumstances described in such statement are material to us.

Factors that could cause actual results, levels of activity, performance, or achievements to differ materially from those expressed or implied by the forward-looking statements include, but are not limited to, the following:

- risks related to our mining and industrial operations;
- geological conditions;
- dependency on a limited number of key production and distribution facilities and critical equipment;
- weather conditions;
- strikes, other forms of work stoppage or slowdown or other union activities;
- the inability to fund necessary capital expenditures or successfully complete capital projects;
- supply constraints or price increases for energy and raw materials used in our production processes;
- our indebtedness and ability to pay our indebtedness;
- restrictions in our debt agreements that may limit our ability to operate our business or require accelerated debt payments;
- tax liabilities;
- financial assurance requirements;
- the inability of our customers to access credit or a default by our customers of trade credit extended by us or financing we have guaranteed;
- our payment of any dividends;
- the impact of competition on the sales of our products;

- risks associated with our international operations and sales;
- the impact of anticipated changes in plant nutrition product prices and customer application rates;
- conditions in the agricultural sector and supply and demand imbalances for competing plant nutrition products;
- increasing costs or a lack of availability of transportation services;
- the seasonal demand for our products;
- our rights and governmental authorizations to mine and operate our properties;
- compliance with foreign and U.S. laws and regulations applicable to our international operations;
- compliance with environmental, health and safety laws and regulations;
- environmental liabilities;
- misappropriation or infringement claims relating to intellectual property;
- product liability claims and product recalls;
- inability to obtain required product registrations or increased regulatory requirements;
- changes in industry standards and regulatory requirements;
- our ability to successfully implement our strategies;
- the loss of key personnel;
- if our computer systems, information technology or operations technology are compromised or the inability to protect confidential or proprietary data;
- our ability to expand our business through acquisitions, integrate acquired businesses and realize anticipated benefits from acquisitions;
- climate change;
- domestic and international general business and economic conditions; and
- other risk factors included in this report or reported from time to time in our filings with the Securities and Exchange Commission (the “SEC”). See “Where You Can Find More Information.”

## **MARKET AND INDUSTRY DATA AND FORECASTS**

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This report includes market share and industry data and forecasts that we obtained from publicly available information and industry publications, surveys, market research, internal company surveys and consultant surveys. Industry publications and surveys, consultant surveys and forecasts generally state that the information contained therein has been obtained from sources believed to be reliable, but there can be no assurance as to the accuracy and completeness of such information. We have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied upon therein. Similarly, internal company surveys, industry forecasts and market research, which we believe to be reliable based upon management’s knowledge of the industry, have not been verified by any independent sources. Except where otherwise noted, references to North America include only the continental United States (“U.S.”) and Canada, references to the United Kingdom (“U.K.”) include only England, Scotland and Wales, and statements as to our position relative to our competitors or as to market share refer to the most recent available data. Statements concerning (a) North American consumer and industrial salt and highway deicing salt markets are generally based on historical sales volumes, (b) U.K. highway deicing salt sales are generally based on historical production capacity, and (c) sulfate of potash are generally based on historical sales volumes. Except where otherwise noted, all references to tons refer to “short tons” and all amounts are in U.S. dollars. One short ton equals 2,000 pounds.

## WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and current reports and other information with the SEC and our SEC filings are available at the SEC's website at [www.sec.gov](http://www.sec.gov). Copies of these documents are also available on our website, [www.compassminerals.com](http://www.compassminerals.com). The information on these websites is not part of this report and is not incorporated by reference into this report. Further, our references to website URLs are intended to be inactive textual references only.

You may also request a copy of any of our filings, at no cost, by writing or telephoning:

Investor Relations  
Compass Minerals International, Inc.  
9900 West 109<sup>th</sup> Street, Suite 100  
Overland Park, Kansas 66210

For general inquiries concerning us, please call (913) 344-9200.

*Unless the context requires otherwise, references in this annual report to the "Company," "Compass Minerals," "CMP," "we," "us" and "our" refer to Compass Minerals International, Inc. ("CMI," the parent holding company) and its consolidated subsidiaries collectively.*

## ITEM 1. BUSINESS

### COMPANY OVERVIEW

Compass Minerals is a leading provider of essential minerals that solve nature's challenges, including salt for winter roadway safety and other consumer, industrial and agricultural uses; specialty plant nutrition products that improve the quality and yield of crops; and specialty chemicals for water treatment and other industrial processes. As of December 31, 2018, we operated 22 production and packaging facilities, including:

- The largest rock salt mine in the world in Goderich, Ontario, Canada;
- The largest dedicated rock salt mine in the U.K. in Winsford, Cheshire;
- A solar evaporation facility located near Ogden, Utah, which is both the largest sulfate of potash specialty fertilizer ("SOP") production site and the largest solar salt production site in the Western Hemisphere;
- Several mechanical evaporation facilities producing consumer and industrial salt; and
- Multiple facilities producing essential agricultural nutrients and specialty chemicals in Brazil.

Our salt business provides highway deicing salt to customers in North America and the U.K. as well as consumer deicing and water conditioning products, ingredients used in consumer and commercial food preparation and other salt-based products for consumer, agricultural and industrial applications in North America. In the U.K., we operate a records management business utilizing excavated areas of our Winsford salt mine with one other location in London, England.

Our plant nutrition business produces and markets specialty plant nutrition products worldwide to distributors and retailers of crop inputs, as well as growers. Our principal plant nutrition product in our Plant Nutrition North America segment is SOP, which we market under the trade name Protassium+. We also sell various premium specialty plant nutrient products under our WolfTrax and ProAcqua brands.

In October 2016, we significantly expanded our plant nutrition business with the acquisition of Produquímica Indústria e Comércio S.A. ("Produquímica," which is now known as Compass Minerals América do Sul Indústria e Comércio S.A.), which constitutes our Plant Nutrition South America segment. The Plant Nutrition South America segment operates two primary businesses in Brazil—agricultural productivity, which manufactures and distributes a broad offering of specialty plant nutrition solution-based products, and chemical solutions, which manufactures and markets specialty chemicals, primarily for the water treatment industry and for use in other industrial processes.

We sell our salt and plant nutrition products primarily in the U.S., Canada, Brazil, the U.K. and the European Union ("EU"). See Note 15 to our Consolidated Financial Statements for financial information relating to our operations by geographic areas.

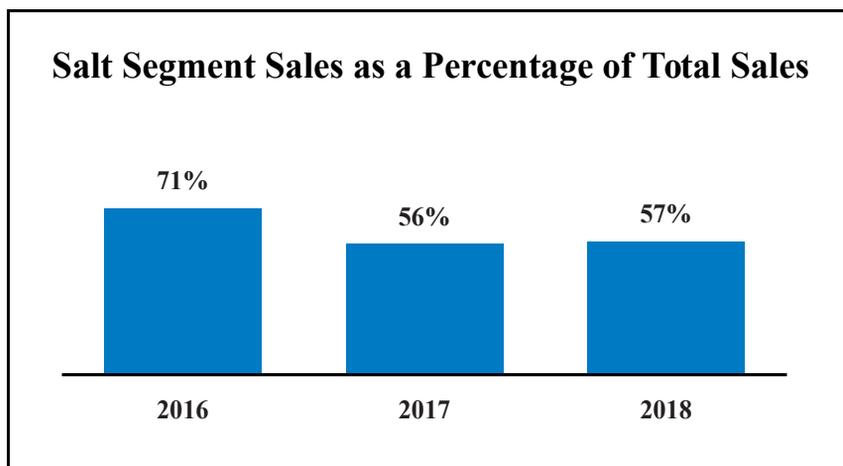
### SALT SEGMENT

#### Overview

Salt is indispensable and enormously versatile with thousands of reported uses. In addition, there are no known cost-effective alternatives for most high-volume uses. Through the use of effective mining techniques and efficient production processes, we leverage our high-grade salt deposits, which are among the most extensive in the world. Further, many of our Salt assets are in

locations that are logistically favorable to our core markets. Our strategy for this business is to focus on driving profitability from every ton we produce through cost efficiency as well as commercial and operational execution.

Through our Salt segment, we produce, market and sell salt (sodium chloride) and magnesium chloride in North America and sodium chloride in the U.K. Our Salt products include rock salt, mechanically-evaporated salt, solar-evaporated salt, brine magnesium chloride and flake magnesium chloride. While we also purchase potassium chloride (“KCl”) and calcium chloride to sell as finished products or to blend with sodium chloride to produce specialty products, sodium chloride represents the vast majority of the products we produce, market and sell. In 2018, the Salt segment accounted for approximately 57% of our gross sales (see Note 15 to our Consolidated Financial Statements for segment financial information). Salt segment sales as a percentage of our total sales has declined in recent years primarily as a result of investments in our plant nutrition business.



Our Salt products are used in a wide variety of applications, including as a deicer for roadways, consumer and professional use, as an ingredient in chemical production, for water treatment, human and animal nutrition and for a variety of other consumer and industrial uses.

The demand for salt has historically remained relatively stable during periods of rising prices and through a variety of economic cycles due to its relatively low cost and a diverse number of end uses. As a result, our cash flows from our Salt segment are not materially impacted by economic cycles. However, demand for deicing salt products is primarily affected by the number and intensity of snow events and temperatures in our service territories.

### Salt Industry Overview

In our primary markets, we estimate that the consumption of highway deicing rock salt in North America, including rock salt used in chemical manufacturing processes, is approximately 36 million tons per year, assuming average winter weather conditions, while the consumer and industrial market is approximately 10 million tons per year. In the U.K., we estimate that the consumption of highway deicing salt is approximately 2 million tons per year, assuming average winter weather conditions. According to the latest available data from the U.S. Geological Survey (“USGS”), during the 30-year period ending in 2016, salt production in the U.S. has increased at a historical average rate of approximately 1% per year, although there have been recent fluctuations above and below this average driven primarily by winter weather variability.

Salt prices vary according to purity, end use and variations in refining and packaging processes. According to the latest USGS data, during the 30-year period ending in 2016, salt prices in the U.S. have increased at a historical average rate of approximately 3% - 4% per year, although there have been recent fluctuations above and below this average. Due to salt’s relatively low production cost, transportation and handling costs tend to be a significant component of the total delivered cost, which makes logistics management and customer service key competitive factors in the industry. The high relative cost associated with transportation of salt tends to favor producers located nearest to customers.

### Processing Methods

As of December 31, 2018, salt mining, other production activities and packaging are conducted at 12 of our facilities. The three processing methods we use to produce salt are described below.

*Underground Rock Salt Mining* - We produce most of the salt we sell through underground mining. In North America, we use a combination of continuous mining and drill and blast techniques. At our Winsford, U.K. mine, we utilize continuous mining techniques. We introduced continuous mining at our Goderich, Ontario mine in 2012 and shifted all of our Goderich mine production to this technology at the end of 2017. Mining machinery moves salt from the salt face to conveyor belts, which transport the salt to the mill center where it is crushed and screened. It is then hoisted to the surface where the processed salt is loaded onto shipping

vessels, railcars or trucks. The primary power sources for each of our rock salt mines are electricity and diesel fuel. Rock salt is sold in our highway deicing product line and for numerous applications in our consumer and industrial product lines.

*Mechanical Evaporation* - Mechanical evaporation involves creating salt-saturated brine from brine wells in underground salt deposits and subjecting this salt-saturated brine to vacuum pressure and heat to precipitate and crystallize salt. The primary power sources used for this process are natural gas and electricity. The resulting product has a high purity and uniform physical shape. Mechanically evaporated salt is primarily sold through our consumer and industrial salt product lines.

*Solar Evaporation* - Solar evaporation is used in areas of the world where high-salinity brine is available and weather conditions provide for a high natural evaporation rate. Salt-saturated brine is pumped into a series of large open ponds where sun and wind evaporate the water and crystallize the salt, which is then mechanically harvested and processed through washing, drying and screening. We produce solar salt at the Great Salt Lake near Ogden, Utah and sell it through both our consumer and industrial and our highway deicing product lines. We also produce magnesium chloride using solar evaporation. After sodium chloride and potassium-rich salts precipitate from brine, a concentrated magnesium chloride brine solution remains, which becomes the raw material we use to produce several magnesium chloride products. We primarily sell these products in our Salt segment through our consumer and industrial and highway deicing product lines.

### **Operations and Facilities**

*Canada* - We produce finished Salt products at four locations in Canada. Rock salt mined at our Goderich mine serves highway deicing markets and consumer and industrial markets in Canada and the Great Lakes region of the U.S., principally through a series of depots located around the Great Lakes and through our packaging facilities. Mechanically evaporated salt used for our consumer and industrial product lines is produced at three of our facilities strategically located throughout Canada: Amherst, Nova Scotia in Eastern Canada; Goderich, Ontario in Central Canada; and Unity, Saskatchewan in Western Canada.

*United States* - We produce finished Salt products at three locations in the U.S. Our Cote Blanche, Louisiana rock salt mine primarily serves highway deicing customers through a series of depots located along the Mississippi and Ohio rivers (and their major tributaries) and chemical and agricultural customers in the Southern and Midwestern U.S. Our solar evaporation facility located near Ogden, Utah principally serves the Midwestern and Western U.S. consumer and industrial markets, provides salt for highway deicing and chemical applications and produces magnesium chloride, which is used in deicing, dust control and unpaved road surface stabilization applications. The production capacity for solar-evaporated salt at our Utah facility is currently only limited by demand. Mechanically evaporated salt for our U.S. consumer and industrial customers is produced at our Lyons, Kansas plant. We also operate four salt packaging facilities located in Illinois, Minnesota, New York and Wisconsin.

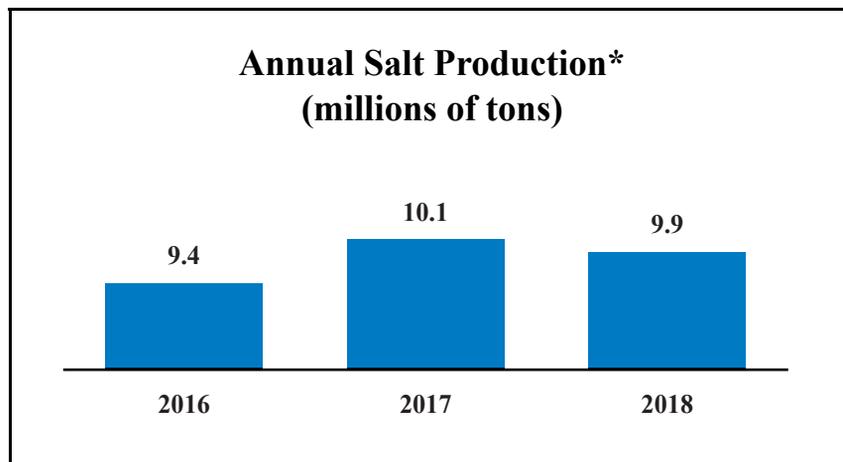
*United Kingdom* - Our Winsford rock salt mine in Northwest England, near Manchester, serves the U.K. highway deicing market, primarily in England and Wales.

Our current production capacity is approximately 15.6 million tons of salt per year. The following table shows the annual production capacity and type of salt produced at each of our owned or leased production locations as of December 31, 2018:

Location	Annual Production Capacity <sup>(a)</sup> (tons)	Product Type
North America		
Goderich, Ontario Mine	8,000,000	Rock Salt
Cote Blanche, Louisiana Mine	3,000,000	Rock Salt
Utah Plant:		
Salt <sup>(b)</sup>	1,500,000	Solar Salt
Magnesium Chloride <sup>(c)</sup>	750,000	Magnesium Chloride
Lyons, Kansas Plant	450,000	Evaporated Salt
Unity, Saskatchewan Plant	160,000	Evaporated Salt
Goderich, Ontario Plant	140,000	Evaporated Salt
Amherst, Nova Scotia Plant	130,000	Evaporated Salt
United Kingdom		
Winsford, Cheshire Mine	1,500,000	Rock Salt

- (a) Annual production capacity is our estimate of the tons that can be produced assuming a normal amount of scheduled down time and operation of our facilities under normal working conditions, including staffing levels, based on actual historical production rates. As we continue our efforts to optimize and refine our production methods, such as continuous mining at our Goderich salt mine, we will update our estimates if necessary as new production data become available.
- (b) Solar salts deposited annually substantially exceed the amount converted into finished products. The amount presented here represents an approximate average amount produced based on recent market demand.
- (c) The magnesium chloride amount includes both brine and flake.

Actual annual Salt production volume levels may vary from the annual production capacity shown in the table above due to a number of factors, including variations in the winter weather conditions, which impact demand for highway and consumer deicing products, the quality of the reserves and the nature of the geologic formation that we are mining at a particular time, unplanned downtime due to safety concerns, incidents and mechanical failures, and other operating conditions. The chart below shows annual Salt production volumes, including magnesium chloride, at our owned and leased production locations:



\* Excludes solar salt harvested at our Utah facility that is not converted into finished product and salt processed at our packaging facilities.

Our production facilities have access to vast mineral deposits. At all of our production locations, we estimate the recoverable salt reserves to last at least several more decades at current production rates and capacities. Our rights to extract those minerals may be contractually limited by geographic boundaries or time. We believe that we will be able to continue extending these agreements, as we have in the past, at commercially reasonable terms without incurring substantial costs or material modifications to the existing lease terms and conditions, thereby allowing us to fully utilize our existing mineral rights.

Our underground mines in Canada (Goderich, Ontario), the U.S. (Cote Blanche, Louisiana) and the U.K. (Winsford, Cheshire) make up 84% of our salt production capacity as of December 31, 2018. Each of these mines is operated with modern mining equipment and utilizes subsurface improvements, such as vertical shaft lift systems, milling and crushing facilities, maintenance and repair shops and extensive raw materials handling systems.

We own the mine site at Goderich, Ontario and maintain a mineral lease for mineral reserves with the provincial government, which grants us the right to mine salt at this site. This mineral lease expires in 2022, and we have an option to renew the lease until

2043 after demonstrating to the lessor that the mine's useful life is greater than the term of the lease. The Cote Blanche mine is operated under land and mineral leases with third-party landowners who grant us the right to mine salt. The mine site and salt reserves at the Winsford mine are owned. We regularly perform mineral reserve studies at our mines to confirm the remaining mineral reserves. The table below reflects current information about our mines:

<b>Mine</b>	<b>Years in operation</b>	<b>Remaining reserve*</b>	<b>Remaining mine life*</b>
Goderich	59 years	553.1 million tons	84 years
Cote Blanche	53 years	308.5 million tons	102 years
Winsford	173 years	29.4 million tons	29 years

\*Based upon the average rates of production used in the latest mineral study.

Our mineral interests are amortized on an individual mine basis over estimated useful lives not exceeding 99 years primarily using the units-of-production method. Our mineral reserve estimates of the remaining tons are derived from periodic reserve studies completed by third-party geological engineering firms. Our mineral reserve estimates and the third-party reserve studies are based on many factors, including the area and volume covered by our mining rights, assumptions regarding our extraction rates based upon an expectation of operating the mines on a long-term basis and the quality of in-place reserves. Established criteria for proven and probable reserves are primarily applicable to mining deposits of discontinuous metal, where both the presence of ore and its variable grade need to be precisely identified. However, the massive continuous nature of evaporative deposits, such as salt deposits, requires proportionately less data for the same degree of confidence in mineral reserves, both in terms of quantity and quality. Reserve studies performed by third-party geological engineering firms suggest that most of our mineral reserves are characterized as probable mineral reserves, with smaller quantities as proven mineral reserves. We have classified our mineral reserves as probable reserves.

In 2012, we acquired mining rights to approximately 100 million tons of salt reserves in the Chilean Atacama Desert. This reserve estimate is based upon an initial report. We will need to complete a feasibility study before we proceed with the development of this project to ensure our salt reserves are probable. The development of this project will require significant infrastructure to establish extraction and logistics capabilities.

We package our Salt products at four additional Company-owned and operated facilities. We estimate that our annual combined packaging capacity at these four facilities is 485,000 tons. Our packaging capacity is based on our estimate of the tons that can be packaged at these facilities assuming a normal amount of scheduled down-time and operation of our facilities under normal working conditions, including staffing levels. We have the capability to significantly increase our annual packaging capacity by increasing our staffing levels in response to demand.

## **Products and Sales**

We sell our Salt products through our highway deicing product line (which includes brine magnesium chloride as well as rock salt treated with this mineral) and our consumer and industrial product line (which includes salt as well as products containing magnesium chloride and calcium chloride in both pure form and blended with salt).

Highway deicing, including salt sold to chemical customers, constituted 62% of our 2018 Salt segment gross sales. Our principal customers are states, provinces, counties, municipalities and road maintenance contractors that purchase bulk deicing salt, both treated and untreated, for ice control on public roadways. Highway deicing salt in North America is sold primarily through an annual tendered bid contract process with governmental entities, as well as through multi-year contracts, with price, product quality and delivery capabilities as the primary competitive market factors. Some sales also occur through negotiated sales contracts with third-party customers, particularly in the U.K. Since transportation costs are a relatively large portion of the cost to deliver products to customers, locations of salt sources and distribution networks also play a significant role in the ability of suppliers to cost-effectively serve customers. We have an extensive network of approximately 80 depots for storage and distribution of highway deicing salt in North America. The majority of these depots are located on the Great Lakes and the Mississippi River and Ohio River systems. Deicing salt product from our Utah facility supplies customers in the Western and upper Midwest regions of the U.S. Treated rock salt, which is typically rock salt with magnesium chloride brine and organic materials that enhance the salt's performance, is sold throughout our markets.

We believe our production capability at our Winsford, Cheshire, U.K. mine and favorable logistics position enhance our ability to meet the U.K.'s winter demands. Due to our strong position, we are viewed as a key supplier by the U.K.'s Highways Agency. In the U.K., approximately 75% of our highway deicing customers have multi-year contracts.

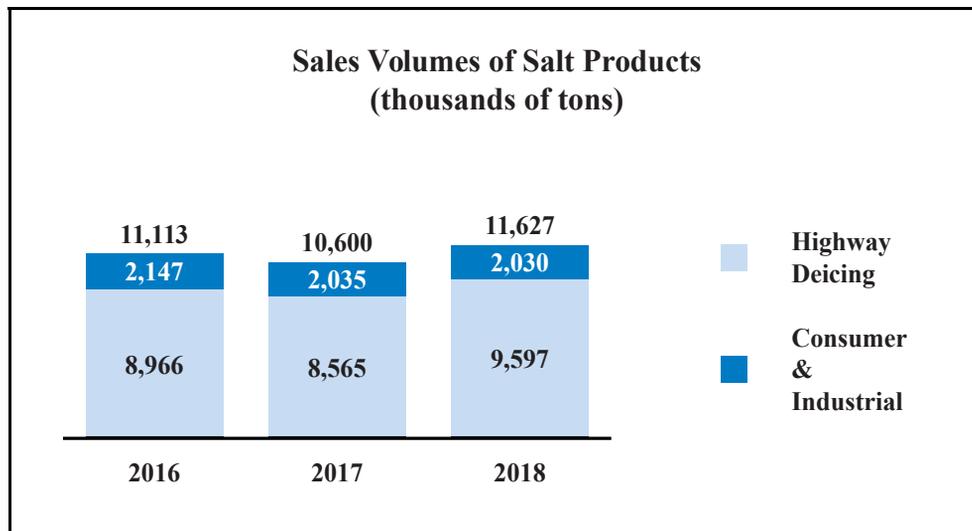
Winter weather variability is the most significant factor affecting salt sales for deicing applications, because mild winters reduce the need for salt used in ice and snow control. On average, over the last three years, approximately two-thirds of our deicing product sales occurred during the North American and European winter months of November through March. The vast majority of our North American deicing sales are made in Canada and the Midwestern U.S. where inclement weather during the winter months causes dangerous road conditions. In keeping with industry practice, we stockpile salt to meet estimated requirements for the next winter season. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Seasonality" for more information on the seasonality of our Salt segment results.

Our principal chemical customers are producers of intermediate chemical products used in the production of vinyls and other chemicals, pulp and paper, as well as water treatment and a variety of other industrial uses. We typically have multi-year supply agreements with these customers. Price, service, product quality and security of supply are the major competitive market factors.

Sales of our consumer and industrial products accounted for 38% of our 2018 Salt segment gross sales. We are the third largest producer of consumer and industrial salt products in North America. These products include commercial and consumer applications, such as water conditioning, consumer and professional ice control, food processing, agricultural applications, table salt and a variety of industrial applications. We believe we are among the largest private-label producers of water conditioning salt in North America and of table salt in Canada. Our Sifto brand encompasses a full line of salt products, which are well recognized in Canada.

Our consumer and industrial business has broad product lines with both private-label and Company brands. Our consumer and industrial product line is distributed through many channels including retail, agricultural, industrial, janitorial and sanitation, and resellers. These consumer and industrial products are channeled from our plants and third-party warehouses to our customers using a combination of direct sales personnel, contract personnel and a network of brokers or manufacturers' representatives.

The chart below shows our annual sales volumes of Salt products:



## Competition

We face strong competition in each of the markets in which we operate. In North America, other large, nationally and internationally recognized companies compete with our Salt products. In addition, there are also several smaller regional producers of salt. There are several importers of salt into North America, which mostly impact the East Coast and West Coast of the U.S. where we have minimal market presence. Two competitors serve the highway deicing salt market in the U.K., one in Northern England and one in Northern Ireland. Typically, there are not significant imports of highway deicing salt into the U.K.

Salt is a commodity, which limits the potential for product differentiation and increases competition. Additionally, low barriers to entry in the consumer and industrial markets increase competition. Our advantageous geographical locations, superior assets and distribution network strengthen our competitive position.

## PLANT NUTRITION

### Overview

Fertilizers are critical for efficient crop production using the limited arable land resources available around the world. The nutrients needed to ensure plant health can be divided into three categories:

- macro nutrients - the traditional NPK fertilizers (nitrogen (N), phosphorus (P) and potassium (K)),
- secondary nutrients - calcium, magnesium and sulfur, and
- specialty plant nutrients - trace elements of iron, manganese, copper, boron, zinc, molybdenum, chlorine and nickel.

In addition, a wide range of nutritional and functional enhancers, biostimulants and adjuvants are critical for a plant's metabolic processes and overall stress and disease resistance. The application and necessity of essential nutritional supplements is based on Liebig's Law of the Minimum, which is the principle that only by increasing the amount of the scarcest nutrient can the growth of a plant or crop be enhanced, despite the plentiful presence of other nutrients. In parallel, the increased adoption of technologically advanced seeds (both conventional and genetically modified) has driven farmers around the globe to address the higher nutritional demands of crops and to apply essential nutritional supplements to unlock the yield potential embedded in these seeds.

Our plant nutrition business focuses on higher-value plant nutrients including SOP, specialty formulations of macro fertilizers and a wide range of high-value specialty products incorporating secondary nutrients, specialty plant nutrients and nutritional and

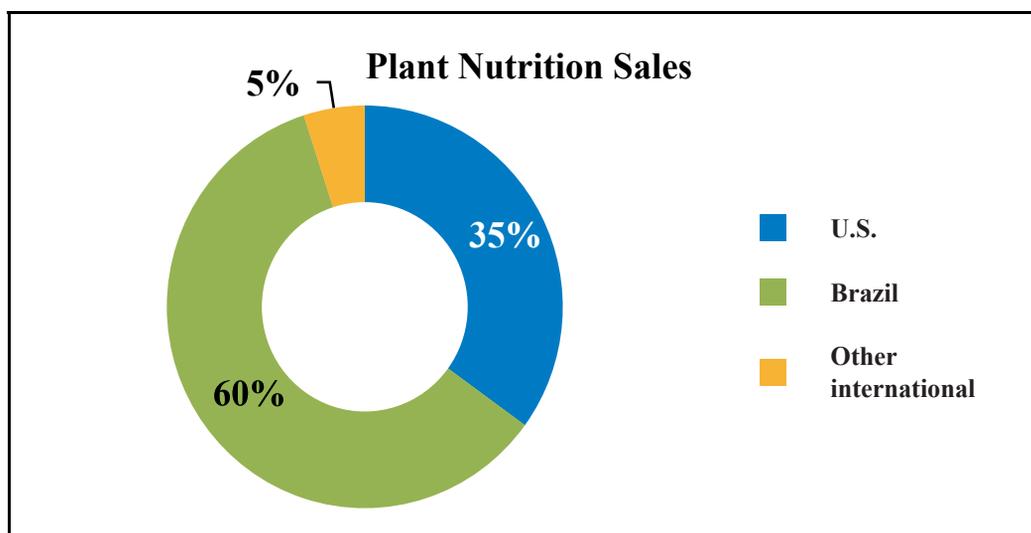
functional enhancers. Our products contribute to improved overall plant-metabolism, nutrient uptake and fixing, stress resistance, plant defense mechanisms, energy conversion, cell division, root enhancement and leaf, flower and fruit formation, among other benefits. The yield-enhancing properties of these supplements have been shown to provide significant farm productivity gains. Our plant nutrition strategy is based upon maximizing the profitability of our current product portfolio, innovating new technology-driven products and robust commercialization of these technologies globally.

Factors influencing the plant nutrition market include world grain and food supply, currency fluctuations, weather and climate change, grower incomes, changes in consumer diets, general levels of economic activity, government food programs, governmental agriculture and energy policies in the U.S. and around the world, and the amount or type of crop grown in certain locations, or the type or amount of fertilizer product used. In addition, our plant nutrition results can be impacted by seasonality (see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Seasonality” for more information).

In October 2016, we completed the acquisition of Produquímica, which expanded our ability to serve growers in Brazil and significantly expanded the number of our specialty plant nutrition products. See Note 4 to our Consolidated Financial Statements for further discussion of this acquisition. As a result of this acquisition, in the fourth quarter of 2016 we added a new reporting segment, Plant Nutrition South America, which is the acquired Produquímica business.

We have begun selling Produquímica products in North America, including the ProAcqua brand. The introduction of the Produquímica products in North America expands the geographic reach of our Produquímica sales, increases our portfolio of products in our Plant Nutrition North America business and creates sales synergies between our businesses. As we continue to build synergies, we will be better positioned to meet our customer’s dynamic demands with excellence.

In 2018, our plant nutrition business, on a combined basis, accounted for 42% of our gross sales (see Note 15 to our Consolidated Financial Statements for segment financial information). The chart below shows our 2018 plant nutrition gross sales by geography:



## PLANT NUTRITION NORTH AMERICA SEGMENT

### Industry Overview

Our Plant Nutrition North America segment includes sales of SOP and specialty plant nutrients. The average annual worldwide consumption of all potash fertilizers is approximately 82 million tons, with muriate of potash (“MOP” or “KCl”) accounting for approximately 86% of all potash used in fertilizer production based upon the most recent industry data published by CRU International in 2017. SOP represents approximately 9% of all potash production. The remainder is supplied in forms containing varying concentrations of potassium (expressed as potassium oxide) along with different combinations of co-nutrients. There are two major forms of potassium-based fertilizer, SOP, a specialty form of potassium which also provides plant-ready sulfur and MOP. SOP (which contains the equivalent of approximately 50% potassium oxide) maintains a price premium over MOP which contains a higher concentration of potassium oxide. Many high-value or chloride-sensitive crops experience improved yields and quality when SOP is applied instead of MOP, and SOP is also a more cost-effective alternative to other forms of specialty potash.

Our North American SOP sales are concentrated in the Western and Southeastern U.S. where the crops and soil conditions favor the use of low-chloride potassium nutrients. Consequently, weather patterns and field conditions in these locations can impact Plant Nutrition North America sales volumes.

While long-term global consumption of potash has increased in response to growing populations and the need for additional food supplies, the market has been challenged over the last few years due to a downturn in the broader crop market which has pressured grower incomes. We expect the long-term demand for potassium nutrients to continue to grow as arable land per capita decreases, thereby encouraging improved crop yields. Additionally, as the broader agricultural market rebounds, increases in grower incomes are expected to also improve the demand for our products.

While used in small prescriptive amounts, specialty plant nutrients play important roles in plant development, and nutrient deficient soils must be replenished to obtain higher crop yields. Growth rates in North America for the specialty plant nutrient market have slowed recently in response to the drop in commodity crop prices.

We expect our future growth to stem from building a market-leading specialty plant nutrition business through the innovation and commercialization of our products as well as strategic partnerships and collaborations designed to enhance differentiation and provide more technology-driven solutions that growers demand in this market.

Approximately 91% of our Plant Nutrition North America sales in 2018 were made to U.S. customers, who include retail fertilizer dealers and distributors of agricultural products as well as professional turf care customers. In some cases, these dealers and distributors combine or blend our Plant Nutrition North America products with other fertilizers and minerals to produce fertilizer blends tailored to individual requirements.

### **Operations and Facilities**

We produce SOP at two facilities, both located in North America, namely at our Utah facility on the Great Salt Lake, and our Wynyard, Saskatchewan, Canada facility on Big Quill Lake. Our Utah facility is the largest SOP production site in North America and one of only four large-scale solar brine evaporation operations for SOP in the world. The facility operates approximately 55,000 acres of solar evaporation ponds to produce SOP and salt, including magnesium chloride, from the Great Salt Lake's naturally occurring brine. The facility is located on land that is both owned and leased under renewable leases from the State of Utah. We believe that our property and operating equipment are maintained in good working condition. This facility has the capability to produce up to 320,000 tons of solar pond-based SOP, approximately 750,000 tons of magnesium chloride and 1.5 million tons of salt annually when weather conditions are typical.

These recoverable minerals exist in vast quantities in the Great Salt Lake. We believe the recoverable minerals exceed 100 years of reserves at current production rates and capacities and the lake quantities are so vast that they will not be significantly impacted by our production. While our rights to extract these minerals are contractually limited, we believe we will be able to extend our lease agreements, as we have in the past, at commercially reasonable terms, without incurring substantial costs or incurring material modifications to the existing lease terms and conditions.

Initially, we draw mineral-rich lake water, or brine, from the Great Salt Lake into our solar evaporation ponds. The brine moves through a series of solar evaporation ponds over a two- to three-year production cycle. As the water evaporates and the mineral concentration increases, some of those minerals naturally precipitate out of the brine and are deposited on the pond floors. These deposits provide the minerals necessary for processing into SOP, salt and magnesium chloride. The evaporation process is dependent upon sufficient lake brine levels and hot, arid summer weather conditions. The potassium-bearing salts are mechanically harvested out of the solar evaporation ponds and refined to high-purity SOP in our production facility.

We also have a unique ability to use KCl and other potassium-rich minerals as a raw material feedstock to supplement our solar harvest to help meet demand when it is economically feasible.

We have invested to increase the efficiency and expand the capacity of our Utah facility through upgrades to our processing plant and our solar evaporation ponds. These investments have included modifications to our existing solar evaporation ponds to increase the annual solar harvest and the extraction yield from the harvest and processing capacity of our SOP plant. In 2017, we completed a project to further expand our SOP production capacity by augmenting our ability to convert KCl into SOP. As a result, our annual SOP production capacity at our Utah facility is currently approximately 550,000 tons, including amounts produced with both solar-pond based feedstock and supplemental KCl feedstock.

We also own our Wynyard, Saskatchewan facility, which contributes 40,000 tons to our annual SOP capacity and is Canada's only SOP production facility. At this facility, we combine sulfate-rich brine with sourced potassium chloride to create SOP through ion exchange and glaserite processes. This product is high purity and is used in crop nutrient applications as well as specialty, non-agricultural applications.

We hold numerous environmental and mineral extraction permits, water rights and other permits, licenses and approvals from governmental authorities authorizing operations at each of our facilities.

### **Products and Sales**

We currently generate most of our revenue and earnings in our Plant Nutrition North America business through the production and sale of SOP. Our SOP is sold in various grades under our Protassium+ brand. Our Protassium+ product line consists of different grades sized for use in broadcast spreaders, direct application and liquid fertilizer solutions. Our turf product line consists of grades sized for use by the turf and ornamental markets and for blends used on golf course greens. We also provide an organic product line with grades sized for a wide range of applications.

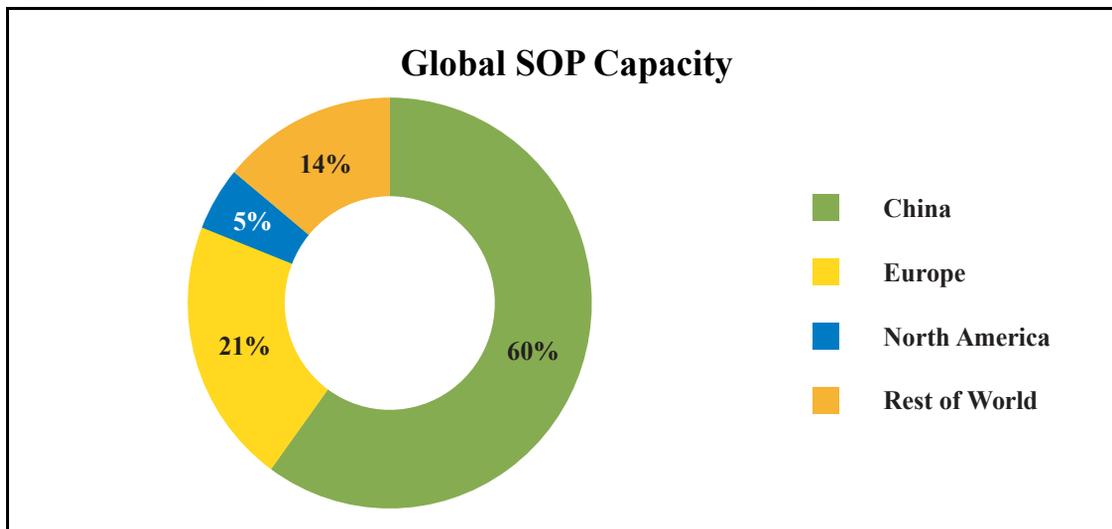
In the fourth quarter of 2017, we launched our water-soluble product line, ProAcqua, in North America. ProAcqua products are made with high-quality ingredients and agronomic blends that are uniquely formulated to complement the way growers manage their nutritional programs. ProAcqua products provide plants with nutrients via fertigation and seasonal foliar applications and are designed to maximize yield potential. We also develop and distribute specialty plant nutrients under the Wolf Trax brand. These innovative products are based upon proprietary and patented technologies and are focused on improving application efficiency by increasing root interception points in order to provide accessible plant nutrition at key developmental stages. Our Wolf Trax and

ProAcqua products contain specialty plant nutrients that are essential to a wide range of crops, including commodity row crops, with different plants and soil conditions requiring different specialty plant nutrients.

Potassium+, Wolf Trax and ProAcqua product lines are generally sold to crop input distributors and dealers who then sell our product to farmers and growers. Our commercial efforts focus on educating and selling the agronomic benefits of SOP as a source of potassium nutrients and various specialty plant nutrients to plant health.

### Competition

SOP is a global market with approximately 60% of the world's 12 million tons of capacity located in China.



Source: 2017 industry data published by CRU International

We are the leading SOP producer and marketer in North America and we also market SOP products internationally, depending on market conditions. Our major competition for SOP sales in North America includes imports from the EU. Fluctuations in the values of foreign currencies in relation to the U.S. dollar coupled with Baltic freight rates impact the level of international competition we face. As the only SOP producer with production facilities in North America, and as a result of our logistically favorable production site near Ogden, Utah, we estimate that our share of the North American market is sizable. In addition to imported SOP, there is functional competition between SOP and other forms of potassium crop nutrients, such as MOP. The specialty plant nutrient market is highly fragmented. Commodity and specialty crops require specialty plant nutrients in varying degrees depending on the crop and soil conditions. While sales of Wolf Trax products have historically been concentrated in North America, we also sell our specialty plant nutrient products globally, primarily in the EU, Central America, South America and the Caribbean. We expect that the ProAcqua brand of soluble specialty plant nutrient products will enhance our position in the North American specialty plant nutrient market.

## PLANT NUTRITION SOUTH AMERICA SEGMENT

### Industry Overview

Our Plant Nutrition South America segment manufactures, distributes and markets a wide array of specialty plant nutrients and supplements developed and formulated from essential primary and secondary nutrients, specialty plant nutrients and biostimulants. These products consist of different chemical molecules, chemical compositions and production processes than conventional NPK fertilizers. This specific category of plant nutrients offers a diversity of delivery mechanisms, low environmental impact, low dosages per acre, reflecting a high degree of innovation and product development. These products also require more marketing than conventional NPK fertilizers, among other differences. Brazilian soils are naturally deficient in nutrients such as zinc, manganese and boron, among others. We estimate that Brazilian farmers, on average, only use approximately 25% of the optimal prescription of essential nutritional supplements. During 2018, 76% of sales generated by Plant Nutrition South America were derived from the manufacturing and marketing of these agricultural products. We believe we are one of the market leaders in Brazil and offer a more comprehensive range of products and brands compared to our competitors.

In addition to agriculture products, this segment produces water and wastewater treatment chemicals in Brazil for cleaning, decontaminating and purifying water as well as process chemicals for industrial use. This business benefits from the rapidly expanding focus on, and increased investment in, improving standards for drinking water purification and wastewater treatment. Our water treatment customers include state and municipal entities, wastewater treatment companies and manufacturing companies that treat their own wastewater. Our chemical solutions business also benefits from growth in Brazilian industrial sectors that use our products, including the oil and gas exploration, mining, pulp and paper production and ethanol production industries. Our involvement in both businesses allows us to benefit from greater purchasing power with suppliers given that a significant portion

of the mineral inputs for both businesses are identical. In 2018, 24% of sales generated by Plant Nutrition South America were derived from our chemical solutions business.

Our strategy for Plant Nutrition South America is to leverage our innovative product portfolio and direct-to-farmer sales platform. We expect to continue to drive market growth by increasing the adoption rate and acre penetration of nutritional supplements. Our plan is to reinforce the use of these supplements as a profitable tool to enhance crop productivity. We use a three-pronged approach to deliver under our strategy, consisting of (1) our specialized agronomic research teams, (2) our technical in-the-field agronomic sales force, and (3) continuous innovation.

We expect to increase sales through new product introductions and growth in direct-to-farmer distribution channels. We continually invest in the development of new products and new generations of existing products that meet the specific needs of our customers. As a result of these efforts, our direct-to-end-customer sales to large farmers have increased as a proportion of total agriculture productivity revenues. Additionally, our Plant Nutrition South America segment provides geographic diversification for our combined plant nutrition business.

### Operations and Facilities

We operate nine production facilities throughout Brazil, including a property we jointly operate with a third-party. Our production facilities are located in the Southeast and Northeast parts of Brazil. Our Plant Nutrition South America production facility network has a significant level of integration. While some production facilities are focused on producing chemical and physical transformation of ingredients, such as our Jacareí I production facility with sulfur derivatives, others are specialized in transforming these ingredients into final products for our customers by mixing them with other ingredients produced in different or the same production facilities. We also use by-products from one production facility as a raw material for another production facility where possible.

The table below shows our Plant Nutrition South America production facilities by product line:

	Production Facility									
	Suzano I	Suzano II	Igarassu	Mauá	Uberlândia	Fermavi <sup>(a)</sup>	Reluz Nordeste	Jacareí I	Jacareí II	
Agriculture Productivity	X	X		X	X	X		X	X	
Chemical Solutions	X		X			X	X			

(a) We hold a 50% ownership interest through a joint venture with Fermavi Eletroquímica Ltda.

Our products are produced through a series of chemical and physical transformations in automated reactors, granulators, grinders and mixers. Our equipment is capable of processing both primary and secondary sources of raw materials, thus enabling us to rapidly remodel our production process to deal with variations in element concentration in raw material feeds. This also allows us flexibility with regard to raw material purchasing opportunities, allowing us to purchase products that are less expensive on a percentage-contained-metal-basis.

### Products and Sales

As of December 31, 2018, our total Plant Nutrition South America portfolio consisted of approximately 950 products, including approximately 725 in agriculture productivity and 225 in chemical solutions. The agriculture productivity products may be applied for different stages of a plant's life cycle, different soil and other growing conditions, different crop types and using different delivery mechanisms. We also provide value-added services to our customers such as soil analysis programs, technical trainings and conferences, crop field test and research, sales support and specialized technical support, which allow us to tailor our Plant Nutrition South America products and sales to a wide variety of customers, diverse types of crops and multiple regions. Through our chemical solutions business, we manufacture, market and supply water treatment products and chemicals for industrial processes. Our water treatment products have many different uses including algae control, alkalinity control, disinfection control, odor and corrosion control, water filtration and water clarification.

### Competition

*Agricultural Productivity* - The Brazilian market for nutritional supplements is highly fragmented with hundreds of market participants. Competitors typically focus their product offerings on specific product categories and delivery mechanisms, geographic regions and selected crops. As a result, we have different competitors for different market situations. The international competitive landscape is also fragmented. We estimate there are approximately 15 international competitors present in Brazil, mainly from the EU.

Market consolidation is likely to continue in the future, as players are challenged to keep up with demands for product innovation, increasingly specialized agronomic and technical skills, the effect of specific legislation, licensing and product registration procedures, cost pressures from economies of scale and other industry trends. Many competitors have limited production capabilities and can better be characterized as resellers, mixers and marketing companies, rather than producers. We differentiate ourselves by innovation, a broad market presence using a large technical sales force, an extensive network of point-of-sales distributors,

resellers and cooperatives and direct sales to large farmers and industrial customers. This presence enhances our new product placement capabilities, thereby driving market growth.

*Chemical Solutions* - We believe we are one of the largest manufacturers of water treatment chemicals in Brazil. We have a strong presence in the Northeast and Southeast regions of Brazil, which allows us to take advantage of efficient logistics due to proximity to raw materials and customers. We estimate that there are approximately five companies that account for approximately two-thirds of the Brazilian water treatment market. However, as the water treatment market is highly regional by nature, average market shares do not reflect the actual competitive strength for each company by geography, product and customer type. Our strategy is to focus on the regions in which our production facilities are located and where our product's attributes give us a naturally strong market positions.

In the case of public customers, suppliers of water treatment chemicals compete through a pre-qualification and public bidding process. Barriers to market entry are therefore related to low cost of production (strongly influenced by access to low raw material costs, reduced logistics and large production scale), consistency of product quality and specification, existing customer relationships and previous supply experience.

We believe we are among the seven primary producers of caustic soda, chlorine and bleach in Brazil. Our market position is substantially stronger in the North and Northeast regions of Brazil where we operate.

## **OTHER**

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DeepStore is our records management business in the U.K. that utilizes portions of previously excavated space in our salt mine in Winsford, Cheshire, for secure underground document storage and one warehouse location in London, England. Currently, DeepStore does not have a significant share of the document storage market in the U.K., and it is not material in comparison to our Salt, Plant Nutrition North America and Plant Nutrition South America segments.

## **INTELLECTUAL PROPERTY**

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To protect our intellectual property, we rely on a combination of patents, trademarks, copyrights, trade secret protection, employee and third-party non-disclosure agreements, license arrangements and domain name registrations. These protections are important to our business and we believe that our success is at least partly dependent on the acquisition and maintenance of these rights. However, we rely primarily on the innovative skills, technical competence, operational knowledge and marketing abilities required by our business in order to succeed.

We sell many of our products under a number of registered trademarks that we believe are widely recognized in the industry. Our trademarks registered pursuant to applicable intellectual property laws include COMPASS MINERALS, PROTASSIUM+, WOLF TRAX (and design), NU-TRAX, PROAQUA, KELLUS, PROFOL, AMERICAN STOCKMAN, FREEZGARD, SAFE STEP, SIFTO and SURE PAWS.

Any issued patents, trademarks or copyrights on our proprietary technology may not provide us with substantial protection or be commercially beneficial to us. The issuance of a patent is not conclusive as to its validity or its enforceability. Competitors may challenge our patent rights. If our patents are held unenforceable, our competitors could commercialize our patented technology.

With respect to proprietary know-how, we rely on trade secret protection and confidentiality agreements. Monitoring the unauthorized use of our technology is difficult, and we may not be able to prevent unauthorized use of our technology. The disclosure or misappropriation of our intellectual property could harm our ability to protect our rights and our competitive position. See "Risk Factors—Our intellectual property may be misappropriated or subject to claims of infringement." for more information.

## **EMPLOYEES**

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As of December 31, 2018, we had 3,071 employees, of which 1,278 are located in Brazil, 961 are located in the U.S., 656 are located in Canada and 176 are located in the U.K. Approximately 50% of our workforce in the U.S., Canada and the U.K. and approximately 30% of our global workforce is represented by collective bargaining agreements. Of our 13 collective bargaining agreements in effect on January 1, 2019, five will expire in 2019, four will expire in 2020, three will expire in 2021 and one will expire in 2027. In addition, trade union membership is mandatory in Brazil, where approximately 40% of our global workforce is located.

**PROPERTIES**

We have leases for packaging facilities and other facilities, which are not individually material to our business. The table below sets forth our principal properties as of December 31, 2018:

Name, Location	Use	Land and Related Surface Rights		Mineral Reserves	
		Owned/Leased	Expiration of Lease	Owned/Leased	Expiration of Lease
Cote Blanche, Louisiana	Rock salt production facility	Leased	2060 <sup>(1)</sup>	Leased	2060 <sup>(1)</sup>
Lyons, Kansas	Evaporated salt production facility	Owned	N/A	Owned	N/A
Utah	SOP, solar salt and magnesium chloride production facility	Owned	N/A	Leased	(2)
Wynyard, Saskatchewan, Canada	SOP production facility	Owned <sup>(3)</sup>	N/A	Leased	2020 <sup>(4)</sup>
Amherst, Nova Scotia, Canada	Evaporated salt production facility	Owned	N/A	Leased	2023 <sup>(5)</sup>
Goderich, Ontario, Canada	Rock salt production facility	Owned	N/A	Leased	2022 <sup>(5)</sup>
Goderich, Ontario, Canada	Evaporated salt production facility	Owned	N/A	Owned	N/A
Unity, Saskatchewan, Canada	Evaporated salt production facility	Owned	N/A	Leased	2037/2030 <sup>(6)</sup>
Winsford, Cheshire, United Kingdom	Rock salt production facility; records management	Owned	N/A	Owned	N/A
London, United Kingdom	Records management	Leased	2028	N/A	N/A
Suzano I, São Paulo, Brazil	Nutritional supplements and other chemicals production facility	Owned	N/A	N/A	N/A
Suzano II, São Paulo, Brazil	Nutritional supplements packaging facility	Owned	N/A	N/A	N/A
Igarassu, Pernambuco, Brazil	Various chemicals production facility	Owned	N/A	N/A	N/A
Mauá, São Paulo, Brazil	Nutritional supplements production facility	Owned	N/A	N/A	N/A
Uberlândia, Minas Gerais, Brazil	Mineral supplements for beef cattle and milk	Owned	N/A	N/A	N/A
Fermavi, Minas Gerais, Brazil <sup>(7)</sup>	Nutritional supplements, water treatment, and other chemicals production facility	Owned	N/A	N/A	N/A
Reluz Nordeste, Alagoas, Brazil	Water treatment and other chemicals production facility	Owned	N/A	N/A	N/A
Jacareí I, São Paulo, Brazil	Nutritional supplements production facility	Owned	N/A	N/A	N/A
Jacareí II, São Paulo, Brazil	Nutritional supplements production and warehouse	Leased	2030	N/A	N/A
Overland Park, Kansas	Corporate headquarters	Leased	2020	N/A	N/A
Paulista, Pernambuco, Brazil	Produquímica headquarters	Leased	2019-2022 <sup>(8)</sup>	N/A	N/A

(1) The Cote Blanche lease includes two 25-year renewal options.

(2) The Utah lease renews on an annual basis.

(3) The Wynyard location also has leases expiring in 2026 for two parcels of land.

(4) The Wynyard mineral lease may be renewed for additional 20-year periods.

(5) Subject to our right of renewal through 2043.

(6) Consists of a lease expiring in 2037 and a lease expiring in 2030 subject to our right of renewal through 2051.

(7) Held through a 50% ownership interest in a joint venture with Fermavi Eletroquímica Ltda.

(8) Consists of several leases for different portions of leased space expiring between 2019 and 2022.

With respect to each facility at which we produce salt, brine or SOP, permits, licenses and approvals are obtained as needed in the normal course of business based on our mine plans and federal, state, provincial and local regulatory provisions regarding mine permitting and licensing. Based on our historical permitting experience, we expect to be able to continue to obtain necessary mining permits and approvals to support historical rates of production.

Our mineral leases have varying terms. Some will expire after a set term of years, while others continue indefinitely. Many of these leases provide for a royalty payment to the lessor based on a specific amount per ton of minerals extracted or as a percentage of revenue. In addition, we own a number of properties and are party to non-mining leases that permit us to perform activities that are ancillary to our mining operations, such as surface use leases for storage at depots and warehouse leases. We believe that all of our leases were entered into at market terms.

The following map shows the locations of our principal operating facilities as of December 31, 2018:



## ENVIRONMENTAL, HEALTH AND SAFETY MATTERS

Our operations subject us to an evolving set of international, federal, national, foreign, state, provincial and local environmental, health and safety (“EHS”) laws and regulations. These EHS laws and regulations regulate, or propose to regulate, the conduct of our mining and production operations, including safety procedures and process safety management; management and handling of raw and in-process materials and finished products; air and water quality impacts from our facilities; management of hazardous and solid wastes; remediation of contamination at our facilities and third-party sites; and post-mining land reclamation.

The Environment, Health and Safety Committee of our Board of Directors works closely with our management to provide oversight of EHS matters impacting us, with the aim of putting in place appropriate strategies and processes to ensure safe and compliant operations and to promote a culture that prioritizes safety and environmental stewardship. The committee monitors our EHS performance against our targets. We have adopted a five-year environmental strategy plan focused on (i) verifying compliance through a combination of internal and third-party audits, (ii) adopting operational excellence tools and associated efficiencies, and (iii) enhancing our focus on sustainable operations. We also employ and consult with environmental specialists to assess and ensure our compliance with EHS laws and regulations.

Costs of compliance with EHS laws and regulations, including management effort, time and resources, have been and are expected to continue to be significant. New or proposed EHS regulatory programs, as well as future interpretations and enforcement of existing EHS laws and regulations, may require modification to our facilities, substantial increases in equipment and operating costs or interruptions, modifications or a termination of operations, the extent to which we cannot predict and which may involve significant capital costs or increases in operating costs. Anticipating future compliance obligations, implementing compliance plans and estimating future costs can be particularly challenging while EHS laws and regulations are under development and have not been adopted.

While a number of our capital projects indirectly result in environmental improvements, we estimate that our 2018 environmental-specific capital expenditures were \$3.9 million. We expect to have approximately the same level of environmental capital expenditures in 2019. However, future capital expenditures are subject to a number of uncertainties, including changes to environmental laws and regulations, changes to our operations or unforeseen remediation requirements, and these expenditures could exceed our expectations.

As of December 31, 2018, we had recorded \$2.2 million of accruals for contingent environmental liabilities. We accrue for contingent environmental liabilities when we believe it is probable that we will be responsible, in whole or in part, for environmental investigation or remediation activities and the expenditures for these activities are reasonably estimable. However, the extent and costs of any environmental investigation or remediation activities are inherently uncertain and difficult to estimate and could exceed our expectations, which could materially affect our financial condition and operating results.

### *Operating Requirements and Impacts*

Our operations require permits for extraction of salt and brine, air emissions, surface water discharges of process material and wastes, waste generation, injection of brine and wastewater into subsurface wells and other activities. As a result, we hold numerous environmental and mineral extraction permits, water rights and other permits, licenses and approvals from governmental authorities authorizing operations at each of our facilities. These permits, licenses and approvals are typically subject to renewals and reissuances. Expansion of our operations or production capacity, or preservation of existing rights in some cases, is also predicated upon securing any necessary permits, licenses and approvals. The terms and conditions of future EHS laws and regulations, permits, licenses and approvals may be more stringent and may require increased expenditures on our part. In addition, although we do not engage in hydraulic fracturing (commonly known as “fracking”), laws and regulations targeting fracking could lead to increased permit requirements and compliance costs for non-fracking operations, including our salt operations, which require permitted wastewater disposal wells.

Our Cote Blanche mine, an underground salt mine located in St. Mary Parish, Louisiana, is subject to regulation by the Mine Safety and Health Administration (“MSHA”) under the Federal Mine Safety and Health Act of 1977, as amended (the “Mine Act”). MSHA is required to regularly inspect the Cote Blanche mine and issue a citation, or take other enforcement action, if an inspector or authorized representative believes that a violation of the Mine Act or MSHA’s standards or regulations has occurred. As required by MSHA, these operations are regularly inspected by MSHA personnel. See “Mine Safety Disclosures” and Exhibit 95 to this report for information concerning mine safety violations and other regulatory matters required by SEC rules. The cost of compliance and penalties for violations of the Mine Act have been and are expected to continue to be substantial. Our underground salt mines located in Goderich, Canada and Winsford, UK are subject to similar regulations regarding health and safety, and the cost of compliance with these regulations also have been and are expected to be substantial.

We have post-closure reclamation obligations, primarily arising under our mining permits or by agreement. Many of these obligations include requirements to maintain financial surety bonds to fund reclamation and site cleanup following the ultimate closure of our mines or certain other facilities. As a result, we maintain financial surety bonds to satisfy these obligations.

We are also impacted by the U.S. Clean Air Act (the “Clean Air Act”) and other EHS laws and regulations that regulate air emissions. These regulatory programs may require us to make capital expenditures (for example, by installing expensive emissions abatement equipment), modify our operational practices, obtain additional permits or make other expenditures, which could be significant. Pursuant to the Clean Air Act, the Environmental Protection Agency reclassified the Salt Lake area as a “serious” non-attainment area in May 2017 due to the presence of certain air pollutants. Because our Utah facility is located in this area, this reclassification could lead to new regulations that could require us to make significant expenditures or require us to modify our operational practices. In addition, we could incur fines or penalties for violations of the Clean Air Act or other EHS laws and regulations that regulate air emissions.

In August 2017, the Brazilian government ratified the United Nations Minamata Convention on Mercury, which commits signatories to compel chlor-alkali facilities to phase out the use of mercury cell facilities by 2025, to ensure that mercury from these facilities is disposed of in an environmentally sound manner and to subject these facilities to record keeping and reporting requirements. As the Brazil government adopts regulations limiting the use of mercury pursuant to the convention’s requirements or otherwise, our Igarassu, Brazil facility which operates a mercury cell facility could be impacted. We cannot predict the timing or content of the final regulations, or its ultimate cost to, or impact on us. To support transitioning away from mercury use at our Igarassu facility, we have invested in, and plan to continue to invest in, non-mercury technology as well as waste water and storm water treatment improvement projects.

From time to time, we have received notices from governmental agencies that we are not in compliance with certain EHS laws, regulations, permits or approvals. Upon receipt of these notices, we evaluate the matter and take all appropriate corrective actions.

### **Remedial Activities**

Many of our past and present facilities have been in operation for decades. Operations at these facilities have historically involved the use and handling of regulated chemical substances, salt, salt byproducts and process tailings by us and our predecessors.

At many of these facilities, releases and disposal of regulated substances have occurred and could occur in the future, which could require us to investigate, undertake or pay for remediation activities under the U.S. Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) and other similar EHS laws and regulations. These laws and regulations may impose “no fault” liability on past and present owners and operators of facilities associated with the release or disposal of hazardous substances, regardless of fault or the legality of the original actions. Additionally, one past or present owner or operator may be required to bear more than its proportional share of liability if payments cannot be obtained from other responsible parties.

In addition, third parties have alleged in the past and could allege in the future that our operations have resulted in contamination to neighboring off-site areas or third-party facilities, including third-party disposal facilities for regulated substances generated by our operations, which could result in liability for us under CERCLA or other EHS laws and regulations.

We have incurred and expect to continue to incur costs and liabilities as a result of our current and former operations and our predecessor’s operations. In the past, we have agreed to undertake or pay for investigations to determine whether remediation will be required under CERCLA or otherwise to address any contamination. In other instances, we have agreed to perform remediation activities or have undertaken voluntary remediation to address identified contamination. Ongoing investigation and remediation activities at our Kenosha, Wisconsin plant are described in Note 12 of our Consolidated Financial Statements.

## **ITEM 1A. RISK FACTORS**

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*We are subject to a number of risks, which could have a material adverse effect on our business, financial condition, results of operations and the value of our securities. You should carefully consider the following risks and all of the information set forth in this report. The risks described below are not the only ones facing our company. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial may also materially and adversely affect our business, financial condition or results of operations.*

### **Operational Risks**

#### ***Our mining and industrial operations involve inherently risky activities.***

Our operations involve significant risks and hazards, including environmental hazards and industrial accidents. Our underground salt mining operations and related processing activities may be subject to industrial and mining accidents, fire, explosions, unusual or unexpected geological formations or movements, water intrusion and flooding. For example, MSHA considers our Cote Blanche mine to be a “gaseous mine” and, as a result, is subject to a heightened risk of explosion and fire. In addition, the types and volumes of certain chemicals manufactured by our Plant Nutrition South America segment’s chemical solutions business pose process safety management risks, including hazards related to chemical process manufacturing and the related storage, handling and transportation of raw materials, products and wastes. These potential risks include pipeline and storage tank leaks and ruptures, explosions and fires, mechanical failure and chemical spills and other discharges or releases of toxic or hazardous substances or gases at our sites or during transportation.

These hazardous activities pose significant management challenges and could result in loss of life, a mine shutdown, damage to or destruction of our properties and surrounding properties, production facilities or equipment, production delays or business

interruption. Our insurance coverage may be insufficient to cover all losses or claims associated with our operations, including these operational risks.

***Geological conditions could lead to a mine shutdown, increased costs and production delays, which could adversely affect results of our operations.***

Our salt mining operations involve complex processes, which are affected by the mineralogy of the mineral deposits and structural geologic conditions and are subject to related risks. For example, unexpected geological conditions could lead to significant water inflows and flooding at any of our underground mines, which could result in a mine shutdown, serious injuries, loss of life, increased operational costs, production delays, damage to our mineral deposits and equipment damage. We have minor water inflows at our Cote Blanche and Goderich salt mines that we actively monitor and manage. Underground mining also poses the potential risk of mine collapse or ceiling collapse (such as the September 2017 partial ceiling collapse at our Goderich mine) because of the mine geology and rate and volume of minerals extracted.

Our mineral reserve estimates of the remaining tons of minerals in our mines are based on many factors, including the area and volume covered by our mining rights, assumptions regarding our extraction rates and duration of mining operations, and the quality of in-place reserves. The actual mineral deposits encountered in our mining operations and the economic viability of mining a mineral deposit may differ materially from our estimates. In addition, we may not be able to access certain mineral deposits as a result of the nature of the geologic formations of our salt mines, which could impact the accuracy of our salt deposit reserve projections.

Variations in the mineralogy of our mineral deposits could limit our ability to extract these deposits, increase our extraction costs, impact the purity and suitability of extracted minerals to create products for sale and to meet customer specifications. This could adversely impact our ability to fulfill our contracts, resulting in significant contractual penalties and loss of customers.

***Our operations are conducted primarily through a limited number of key production and distribution facilities, and we are also dependent on critical equipment.***

We conduct our operations through a limited number of key production and distribution facilities. These facilities include our underground salt mines, our evaporation plants, our SOP solar evaporation ponds and facilities, certain facilities in Brazil used by our Plant Nutrition South America businesses and the distribution facilities, depots and ports owned by us and third parties. Many of our products are produced at one or two of these facilities. Any disruption of operations at one of these facilities could significantly affect production of our products, distribution of our products or our ability to fulfill our contractual obligations, which could damage our customer relationships.

For example, our two North American salt mines together constituted approximately 74% of our salt production capacity as of December 31, 2018 and supply most of the salt sold by our North American highway deicing business and significant portions of the salt sold by our consumer and industrial business. A production interruption at one of our salt mines could adversely affect our ability to fulfill our salt contracts and our ability to secure future contracts in affected markets or other markets. In addition, we only have a limited number of distribution facilities in the markets in which we sell our salt products. Failure to have our salt products at a specific distribution facility when needed (for example during a snow event) could adversely impact our ability to fulfill our highway deicing sales contracts, resulting in significant contractual penalties and loss of customers.

Similarly, many of our plant nutrition products are only produced at one or two facilities. We primarily produce SOP at our solar evaporation ponds and facilities located adjacent to the Great Salt Lake and also produce SOP at our facility near Big Quill Lake. SOP production from these facilities could be disrupted or negatively impacted by structural damage, as a result of dike failure or other factors, which could result in reduced sales and revenue. In addition, in our Plant Nutrition South America business, we use products manufactured at certain of our production facilities as inputs to products manufactured at our other production facilities in Brazil. An interruption at one of our production facilities could result in production disruptions at other facilities in Brazil, as alternative sources for raw materials or other materials might not be available at reasonable prices, on a timely basis, or at all. A production interruption or disruption at one or more of our facilities could result in a loss of customers, a loss in revenue or subject us to fines or penalties.

Our operations depend upon critical equipment, such as our continuous miners, hoists, conveyor belts, bucket elevators, baghouses and dryers. This equipment could be damaged or destroyed, suffer breakdowns or failures or deteriorate due to wear and tear sooner than we estimate, and we may be unable to replace or repair the equipment in a timely manner or at a reasonable cost. If these events occur, we may incur additional maintenance and capital expenditures, our operations could be materially disrupted and we may not be able to produce and ship our products.

***The results of our operations are dependent on and vary due to weather conditions. Additionally, adverse weather conditions or significant changes in weather patterns could adversely affect us.***

Weather conditions, including amounts, timing and duration of wintry precipitation and snow events, excessive hot or cold temperatures, rainfall and drought, can significantly impact our sales, production, costs and operational results and impact our customers. From year to year, sales of our deicing products and profitability of the Salt segment may be affected by weather conditions in our markets. Any prolonged change in weather patterns in our markets, as a result of climate change or otherwise, could have a material impact on the results of our operations.

In addition, our ability to produce SOP, salt and magnesium chloride from our solar evaporation ponds located near Ogden, Utah is dependent upon sufficient lake brine levels and hot, arid summer weather conditions. Prolonged periods of precipitation, lack of sunshine, cooler weather or increased mountain water run-off during the evaporation season could reduce mineral concentrations and evaporation rates, leading to decreases in our production levels. Similarly, drought or decreased mountain snowfall and associated fresh water run-off could change brine levels, impacting our mineral harvesting process, amount and timing. Lake level fluctuations and other factors could alter brine levels or mineral concentration levels, which may disrupt our typical two- to three-year evaporation production cycle. Similar factors could negatively impact the lake level and concentration of sulfates at the Big Quill Lake, impacting the production at our Wynyard facility. The occurrence of these events at the Great Salt Lake or Big Quill Lake could lead to decreased production levels, increased operating costs and significant additional capital expenditures.

Weather conditions have historically caused volatility in the agricultural industry (and indirectly in our results of operations) by causing crop failures or significantly reduced harvests, which can adversely affect application rates, demand for our plant nutrition products and our customers' creditworthiness. Weather conditions can also lead to drought or wild fires, which could also adversely impact growers' crop yields and the uptake of plant nutrients, reducing the need for application of plant nutrition products for the next planting season which could result in lower demand for our plant nutrition products and impact sale prices.

***Strikes, other forms of work stoppage or slowdown and other union activities could disrupt our business and negatively impact our financial results.***

Approximately 50% of our workforce in the U.S., Canada and the U.K. and approximately 30% of our global workforce was represented by collective bargaining agreements as of December 31, 2018. Of our 13 collective bargaining agreements in effect on January 1, 2019, five will expire in 2019, four will expire in 2020, three will expire in 2021 and one will expire in 2027. In addition, trade union membership is mandatory in Brazil, where approximately 40% of our global workforce is located.

Unsuccessful contract negotiations or adverse labor relations at any of our locations could result in strikes, work stoppages, work slowdowns, dissatisfied employees or other actions, which could disrupt our business and operations. These disruptions could negatively impact our business, our operations, our ability to produce or sell our products, our ability to service our customers and our ability to recruit and retain personnel, and could result in significant additional costs as well as adversely affect our reputation, financial condition and operating results.

***Our business is capital intensive, and the inability to fund necessary capital expenditures or successfully complete our capital projects could have an adverse effect on our growth and profitability.***

In recent years, we have made significant expenditures on large capital projects, including a shaft relining project at our Goderich mine, implementing continuous mining at our Goderich mine and expanding our SOP processing plant at our Utah facility. In addition, maintaining our existing facilities requires significant capital expenditures, which may fluctuate materially. We also may make significant capital expenditures in the future to expand or modify our existing operations, including projects to expand or improve our facilities or equipment and projects to improve our computer systems, information technology and operations technology. These activities or other capital improvement projects may require the temporary suspension of production at our facilities, which could have a material adverse effect on the results of our operations.

Any capital project we undertake involves risks, including cost overruns, delays and performance uncertainties, and could interrupt our ongoing operations. The expected benefits from any of our capital projects may not be realized in accordance with our projections. Our capital projects may also result in other unanticipated adverse consequences, such as the diversion of management's attention from other operational matters or significant disruptions to our ongoing operations.

Although we currently finance most of our capital expenditures through cash provided by operations, we also may depend on increased borrowing or other financing arrangements to fund future capital expenditures. If we are unable to obtain suitable financing, we may not be able to complete future capital projects and our ability to maintain or expand our operations may be limited. The occurrence of these events could have a material adverse effect on our business, financial condition and results of operations.

***Our production processes rely on the consumption of natural gas, electricity and certain other raw materials. A significant interruption in the supply or an increase in the price of any of these could adversely affect our business.***

Energy costs, primarily natural gas and electricity, represent a substantial part of our total production costs for our products. Our profitability is impacted by the price and availability of natural gas and electricity we purchase from third parties. Natural gas is a primary energy source used in the mechanically evaporated salt production process. Our contractual arrangements for the supply of natural gas have terms of up to three years, do not specify quantities and are automatically renewed unless either party elects not to do so. In addition, electricity is a primary energy source used by our Plant Nutrition South America businesses, and we have electricity contracts with terms of up to five years and generally do not automatically renew. We do not have arrangements in place with back-up suppliers. We use natural gas derivatives to hedge our financial exposure to the price volatility of natural gas. A significant increase in the price of energy that is not recovered through an increase in the price of our products or covered through our hedging arrangements, or an extended interruption in the supply of natural gas or electricity to our production facilities, could have a material adverse effect on our business, financial condition and results of operations.

We use KCl in our salt and plant nutrition operations. Large price fluctuations in KCl can occur without a corresponding change in the sales price of our products sold to our customers. This could change the profitability of our products that require KCl, which could materially affect the results of our operations.

## **Financial Risks**

### ***Our indebtedness and ability to pay our indebtedness could adversely affect our business and financial condition.***

We have a significant amount of indebtedness and may incur additional debt in the future. As of December 31, 2018, we had \$1.37 billion of outstanding indebtedness, including \$1.03 billion of borrowings under our senior secured credit facilities, which are further described in Note 10 of our Consolidated Financial Statements. We pay significant interest on our indebtedness, with variable interest on our borrowing under our senior secured credit facilities based on prevailing interest rates. Significant increases in interest rates will increase the interest we pay on our debt. Our indebtedness could:

- limit our ability to borrow additional money or sell our stock to fund our working capital, capital expenditures and debt service requirements;
- impact our ability to implement our business strategy and limit our flexibility in planning for, or reacting to, changes in our business as well as changes to economic, regulatory or other competitive conditions;
- place us at a competitive disadvantage compared to our competitors with greater financial resources;
- make us more vulnerable to a downturn in our business or the economy;
- require us to dedicate a substantial portion of our cash flow from operations to the repayment of our indebtedness, thereby reducing the availability of our cash flow for other purposes; and
- materially and adversely affect our business and financial condition if we are unable to meet our debt service requirements or obtain additional financing.

In the future, we may incur additional indebtedness or refinance our existing indebtedness. If we incur additional indebtedness or refinance, the risks that we face as a result of our leverage could increase. Financing may not be available when needed or, if available, may not be available on commercially reasonable or satisfactory terms. Any downgrades from credit rating agencies such as Moody's or Standard & Poor's may adversely impact our ability to obtain financing or the terms of such financing. In June 2017, Standard & Poor's downgraded our credit rating to a BB- rating.

Our ability to make payments on our indebtedness, refinance our indebtedness and fund planned capital expenditures will depend on our ability to generate future cash flows from operations. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. There can be no assurance that our business will generate sufficient cash flows from operations or that future borrowings will be available to us under our revolving credit facility in an amount sufficient to enable us to make payments with respect to our indebtedness or to fund our other liquidity needs. If this were the case, we might need to refinance all or a portion of our indebtedness on or before maturity, sell assets, reduce or delay capital expenditures or seek additional equity financing. Our inability to obtain needed financing or generate sufficient cash flows from operations may require us to abandon or curtail capital projects, strategic initiatives or other investments, cause us to divest our business or impair our ability to make acquisitions, enter into joint ventures or engage in other activities, which could materially impact our business.

### ***The agreements governing our indebtedness impose restrictions that may limit our ability to operate our business or require accelerated debt payments.***

Our agreements governing our indebtedness contain covenants that potentially limit our ability to:

- incur additional indebtedness or contingent obligations or grant liens;
- pay dividends or make distributions to our stockholders;
- repurchase or redeem our stock;
- make investments or dispose of assets;
- prepay, or amend the terms of, certain junior indebtedness;
- engage in sale and leaseback transactions;
- make changes to our organizational documents or fiscal periods;
- create or permit certain liens on our assets;
- create or permit restrictions on the ability of certain subsidiaries to make certain intercompany dividends, investments or asset transfers;
- enter into new lines of business;
- enter into transactions with our stockholders and affiliates; and
- acquire the assets of, or merge or consolidate with, other companies.

The credit agreement governing our senior secured credit facilities also requires us to maintain financial ratios, including an interest coverage ratio and a total leverage ratio, which we may be unable to maintain. As of December 31, 2018, our total leverage ratio (as calculated under the terms of our credit agreement) was 4.3x, and if our leverage ratio exceeds 4.5x, we would be in default under our credit agreement.

Various risks, uncertainties and events beyond our control could affect our ability to comply with the covenants, financial tests and ratios required by the agreements governing our indebtedness. If we default under our agreements governing our indebtedness, our lenders could cease to make further extensions of credit, accelerate payments under our other debt instruments (including hedging instruments) that contain cross-acceleration or cross-default provisions and foreclose upon any collateral securing that debt as well as restrict our ability to make certain investments and payments, pay dividends, repurchase our stock, enter into transactions with affiliates, make acquisitions, merge and consolidate, or transfer or dispose of assets.

If our lenders were to require immediate repayment, we may need to obtain new financing to be able to repay them immediately, which may not be available or, if available, may not be available on commercially reasonable or satisfactory terms. Under these circumstances, we might not have sufficient funds or other resources to satisfy all of our obligations.

***We are subject to tax liabilities which could adversely impact our profitability, cash flow and liquidity.***

We are subject to income tax in the U.S., Canada, Brazil and U.K. Our effective tax rate could be adversely affected by changes in the mix of earnings in countries with differing statutory tax rates, changes in the valuation of deferred tax assets and liabilities and the discovery of new information in the course of our tax return preparation process. Our effective tax rate, tax expense and cash flows could also be adversely affected by changes in tax laws. In December 2017, the U.S. enacted the Tax Cuts and Jobs Act (the “Act,” which is commonly referred to as “U.S. tax reform”). The Act makes broad and complex changes to the U.S. tax code, and it will take time for additional clarifying guidance and legislation to be issued, which are necessary for the interpretation of these comprehensive changes. Based on our current understanding of the law, we have recorded significant impacts to our fourth quarter and full year 2018 and 2017 financial results. The impact of the Act on our financial results may differ, possibly materially, due to potential changes in the Act (including with respect to the regulations promulgated under the Act) or changes to its interpretation. See “Management’s Discussion and Analysis of Financial Condition and Results of Operation—Investments, Liquidity and Capital Resources” and Note 8 to our Consolidated Financial Statements for more details. We are also subject to audits in various jurisdictions and may be assessed additional taxes as a consequence of an audit.

Canadian provincial tax authorities have challenged our tax positions and assessed additional taxes on us, which are described in Note 8 of our Consolidated Financial Statements. These tax assessments and future tax assessments could be material if the disputes are not resolved in our favor.

In the ordinary course of our business, there are many transactions and calculations that could be challenged by taxing authorities. This includes the values charged on the transfer of products between our subsidiaries. Although we believe our tax estimates and calculations are reasonable, they have been challenged by taxing authorities in the past. The final determination of any tax audits and litigation may take several years and be materially different from our historical income tax provisions and accruals in our financial statements. If additional taxes are assessed as a result of an audit, assessment or litigation, there could be a material adverse effect on our financial condition, income tax provision and net income in the affected periods as well as future profitability, cash flows and our ability to pay dividends and service our debt.

***We are subject to financial assurance requirements and failure to satisfy these requirements could materially affect our business, results of our operations and our financial condition.***

In connection with our dispute of tax assessments made by Canadian provincial tax authorities (described in Note 8 of our Consolidated Financial Statements), we are required to post and maintain financial performance bonds. In addition, as part of our business operations, we are required to maintain financial surety or performance bonds with certain of our North American deicing customers and to fund reclamation and site cleanup following the ultimate closure of our mines and certain other facilities. We incur costs to maintain these financial assurance bonds and failure to satisfy these financial assurance requirements could materially affect our business, the results of our operations and our financial condition.

***If our customers are unable to access credit, they may be not be able to purchase our products. In addition, we extend trade credit to certain customers and guarantee financing that certain customers use to purchase our products. The results of our operations may be adversely affected if customers default on these obligations.***

Some of our customers require access to credit in order to purchase our products. A lack of available credit to customers, due to global or local economic conditions or for other reasons, could adversely affect demand for our products and the sales of our products.

We extend trade credit to our customers in the United States and throughout the world, in some cases for extended periods of time. In Brazil, where there are fewer third-party financing sources available to farmers, we also have several programs under which we guarantee customers’ financing from financial institutions that they use to purchase our products. If these customers are unable to repay the trade credit from us or financing from their financial institutions, the results of our operations could be adversely affected. Our customers may be unable to repay the trade credit from us or financing from their financial institutions as a result of market conditions in the agricultural sector, adverse weather conditions and increases in prices for other inputs that could increase the working capital requirements, indebtedness and other liabilities of our customers. We may not be able to limit our credit and collectability risk or avoid losses.

***We may not pay cash dividends or pay smaller cash dividends on our common stock in the future.***

We have regularly declared and paid quarterly cash dividends on our common stock consistently since becoming a public company. Any future payment and the amount of any future payment of cash dividends will depend upon our financial condition, earnings, legal requirements, restrictions in our debt agreements and other factors deemed relevant by our board of directors. Although our operations are conducted through our subsidiaries, none of our subsidiaries is obligated to make funds available to pay dividends on our common stock. Accordingly, our ability to pay dividends to our stockholders is dependent on the earnings and the distribution of funds from our subsidiaries. Certain agreements governing our indebtedness contain limitations on our ability to pay dividends (including regular annual dividends), as described under “—The agreements governing our indebtedness impose restrictions that may limit our ability to operate our business or require accelerated debt payments.” We cannot provide assurances that the agreements governing our current and future indebtedness will permit us to pay dividends on our common stock.

**Competition, Sales and Pricing Risks*****Our products face strong competition and if we fail to successfully attract and retain customers and invest in product development, capital improvements, productivity and quality improvements, sales of our products could be adversely affected.***

We encounter strong competition in many areas of our business and our competitors may have significantly more financial resources than we do. Competition in our product lines is based on a number of factors, including product quality and performance, logistics (especially in salt distribution and Brazil chlor-alkali products), brand reputation, price and quality of customer service and support. Many of our customers attempt to reduce the number of vendors from which they purchase in order to increase their efficiency. Our customers demand a broad product range and we must continue to develop our expertise in order to manufacture and market these products successfully. To remain competitive, we need to invest in manufacturing, productivity, product innovation, marketing, customer service and support and our distribution networks. We may not have sufficient resources to continue to make such investments or maintain our competitive position. We may have to adjust our prices, strategy, product innovation, distribution or marketing efforts to stay competitive.

The demand for our products may be adversely affected by technological advances or the development of new or less costly competing products. For example, the development of substitutes for our plant nutrition products that can more efficiently mix with other agricultural inputs or have more efficient application methods may impact the demand for our products. Many of our products, including sodium chloride, magnesium chloride and SOP, have historically been characterized by a slow pace of technological advances. However, new production methods or sources for our products or the development of substitute or competing products could materially adversely affect the demand and sales of our products.

Changes in competitors’ production, geographic or marketing focus could have a material impact on our business. We face global competition from new and existing competitors who have entered or may enter the markets in which we sell, particularly in our plant nutrition business. Some of our competitors may have greater financial and other resources than we do or are more diversified, making them less vulnerable to industry downturns and better positioned to pursue new expansion and development opportunities. Our competitive position could suffer if we are unable to expand our operations through investments in new or existing operations or through acquisitions, joint ventures or partnerships.

***Risks associated with our international operations and sales could adversely affect our business and earnings.***

We have significant operations in Canada, Brazil and the U.K. Our 2018 sales outside the U.S. were 48% of our total 2018 sales. Our overall success as a global business depends on our ability to operate successfully in differing economic, political and cultural conditions. Our international operations and sales are subject to numerous risks and uncertainties, including:

- economic developments including changes in currency exchange rates, inflation risks, exchange controls, tariffs, other trade protection measures and import or export licensing requirements;
- difficulties and costs associated with complying with laws, treaties and regulations, including tax laws and labor regulations, and changes to laws, treaties and regulations;
- restrictions on our ability to own or operate subsidiaries, make investments or acquire new businesses;
- restrictions on our ability to repatriate earnings from our non-U.S. subsidiaries to the U.S. or the imposition of withholding taxes on remittances and other payments by our subsidiaries;
- political developments, government deadlock, political instability, political activism, terrorist activities, civil unrest and international conflicts; and
- uncertain and varying enforcement of laws and regulations and weak protection of intellectual property rights.

A significant portion of our cash flow is generated in Canadian dollars, Brazilian reais and British pounds sterling and our consolidated financial results are reported in U.S. dollars. Our reported results can significantly increase or decrease based on exchange rate volatility after translation of our results into U.S. dollars. Exchange rate fluctuations could also impact our ability to meet interest and principal payments on our U.S. dollar-denominated debt. In addition, we incur currency transaction risk when we enter into a purchase or a sales transaction using a currency other than the local currency of the transacting entity. We may not be able to effectively manage our currency risks. For more information, see “Management’s Discussion and Analysis of Financial

Condition and Results of Operations—Effects of Currency Fluctuations and Inflation,” and “Quantitative and Qualitative Disclosures About Market Risk.”

In addition, we may face more competition in periods when foreign currency exchange rates are favorable to our competitors. A relatively strong U.S. dollar increases the attractiveness of the U.S. market for some of our international competitors while decreasing the attractiveness of other markets to us. Similarly, a relatively strong Brazilian real increases the attractiveness of the Brazil market for our international competitors.

The decision by U.K. voters to leave the EU could cause volatility in global stock markets, currency exchange rate fluctuations and increased regulatory complexities. These changes may adversely affect the results of our operations.

***Anticipated changes in plant nutrition prices and customer application rates can have a significant effect on the demand and price for our plant nutrition products.***

When customers anticipate increasing plant nutrition selling prices, they tend to accumulate inventories in advance of the expected price increase. Similarly, customers tend to delay their purchases when they anticipate future selling prices for plant nutrition products will stabilize or decrease. These customer expectations can lead to a lag in our ability to realize price increases for our products and adversely impact our sales volumes and selling prices.

Growers’ decisions to purchase plant nutrition products and the application rate for plant nutrition products depend on many factors, including expected grower income, crop prices, plant nutrition product prices, commodity prices, input prices and nutrient levels in the soil. Customers are more likely to decrease purchases and application rates when they expect declining agricultural economics or relatively high plant nutrition costs, other costs and soil nutrient levels. This variability can materially impact our prices and volumes sold.

***Conditions in the agricultural sector and supply and demand imbalances for competing plant nutrition products can impact the price and demand for our products.***

Conditions in the North American and Brazilian agricultural sectors can significantly impact our plant nutrition business. The North America and Brazil agricultural sector can be affected by a number of factors, including weather conditions, field conditions (particularly during periods of traditionally high plant nutrition application), government policies, tariffs and import and export markets.

Demand for our products in the agricultural sector is affected by crop prices, crop selection, planted acreage, application rates, crop yields, product acceptance, population growth and changes in dietary habits, among other things. Supply is affected by available capacity, operating rates, raw material costs and availability, feasible transportation, government policies, tariffs and global trade. In addition, the demand and price of plant nutrition products can be affected by factors such as plant disease. For example, Asian soybean rust has in certain years affected soybean crops in Brazil and the United States, reducing demand for plant nutrition products.

MOP is the least expensive form of potash fertilizer and, consequently, it is the most widely used potassium source for most crops. SOP is utilized by growers for many high-value crops, especially crops for which low-chloride content fertilizers or the presence of sulfur improves quality and yield, such as almonds and other tree nuts, avocados, citrus, lettuce, tobacco, grapes, strawberries and other berries. Lower prices or demand for these crops could adversely affect demand for our products and the results of our operations.

When the demand and price of potash are high, our competitors are more likely to increase their production and invest in increased production capacity. An over-supply of MOP or SOP domestically or worldwide could unfavorably impact the prices we can charge for our SOP, as a large price disparity between potash products could cause growers to choose MOP or other less-expensive alternatives, which could adversely impact our sales volume and the results of our operations.

***Increasing costs or a lack of availability of transportation services could have an adverse effect on our ability to deliver products at competitive prices.***

Transportation and handling costs are a significant component of our total delivered product cost, particularly for our salt products. The high relative cost of transportation favors producers whose mines or facilities are located near the customers they serve. We contract bulk shipping vessels, barges, trucking and rail services to move our products from our production facilities to distribution outlets and customers. A reduction in the dependability or availability of transportation services, a significant increase in transportation service rates, adverse weather and changes to water levels on the waterways we use could impair our ability to deliver our products economically to our customers or expand our markets. For example, if the Mississippi river were to flood significantly, barges may be unable to traverse the river system and we may be prevented from timely delivering our salt products to our customers, which could increase costs to deliver our products and adversely impact our ability to fulfill our contracts, resulting in significant contractual penalties and loss of customers.

In addition, diesel fuel is a significant component of our transportation costs. Some of our customer contracts allow for full or partial recovery of changes in diesel fuel costs through an adjustment to the selling price. However, a significant increase in the price of diesel fuel that is not passed through to our customers could materially increase our costs and adversely affect our financial results.

Significant transportation costs relative to the cost of certain of our products, including our salt products and certain products sold by our Plant Nutrition South America segment, limit our ability to increase our market share or serve new markets. In addition, policies in Brazil to set minimum freight rates, enacted following the May 2018 truckers' strike in Brazil, could materially reduce demand for our products and impact our prices and volumes sold.

***The demand for our products is seasonal.***

The demand for our salt and plant nutrition products is seasonal, and the degree of seasonality can change significantly from year to year due to weather conditions, including the number of snow events, rainfall and other factors.

Our salt deicing business is seasonal. On average, in each of the last three years, approximately two-thirds of our deicing product sales occurred during the North American and European winter months of November through March. Winter weather events are not predictable, yet we must stand ready to deliver deicing products to local communities with little advance notice under the requirements of our highway deicing contracts. As a result, we attempt to stockpile our highway deicing salt throughout the year to meet estimated demand for the winter season. Failure to deliver under our highway deicing contracts may result in significant contractual penalties and loss of customers. Servicing markets typically serviced by one production facility with product from an alternative facility may add logistics and other costs and reduce profitability.

Our plant nutrition business is also seasonal. For example, the strongest demand for our plant nutrition products in Brazil typically occurs during the spring planting season. As a result, we and our customers generally build inventories during the low demand periods of the year to ensure timely product availability during the peak sales season. The seasonality of this demand results in our sales volumes and net sales for our Plant Nutrition South America segment usually being the highest during the third and fourth quarters of each year (as the spring planting season begins in September in Brazil).

If seasonal demand is greater than we expect, we may experience increased costs and product shortages, and our customers may turn to our competitors for products that they would otherwise have purchased from us. If seasonal demand is less than we expect, we may have excess inventory to be stored (in which case we may incur increased storage costs) or liquidated (in which case the selling price may be below our costs). If prices for our products rapidly decrease, we may be subject to inventory write-downs. Our inventories may also become impaired through obsolescence or the quality may be impaired if our inventories are not stored properly. Low seasonal demand could also lead to increased unit costs.

**Legal, Regulatory and Compliance Risks**

***Our operations depend on our rights and governmental authorizations to mine and operate our properties.***

We hold numerous environmental and mineral extraction permits, water rights and other permits, licenses and approvals from governmental authorities authorizing operations at each of our facilities. A decision by a governmental agency to revoke, substantially modify, deny or delay renewal of or apply conditions to an existing permit, license or approval could have a material adverse effect on our ability to continue operations at the affected facility and result in significant costs. For example, certain indigenous groups have challenged the Canadian government's ownership of the land under which our Goderich mine is operated. There can be no assurances that the Canadian government's ownership will be upheld or that our existing mining and operating permits will not be revoked or otherwise affected. In addition, although we do not engage in fracking, laws and regulations targeting fracking could lead to increased permit requirements and compliance costs for non-fracking operations, including our salt operations, which require permitted wastewater disposal wells.

Furthermore, many of our facilities are located on land leased from governmental authorities or third parties. Our leases generally require us to continue mining in order to retain the lease, the loss of which could have a material adverse effect on our ability to continue operations at the affected facility and result in significant costs. In some instances, we have received access rights or easements from third parties which allow for a more efficient operation than would exist without the access or easement. Loss of these access rights or easements could have a material adverse effect on us. In addition, many of our facilities are located near existing and proposed third-party industrial operations that could affect our ability to fully extract, or the manner in which we extract, the mineral deposits to which we have mining rights. For example, certain neighboring operations or land uses may require setbacks that could prevent us from mining portions of our mineral reserves or using certain mining methods.

Expansion of our operations or production capacity, or preservation of existing rights in some cases, is also predicated upon securing any necessary permits, licenses and approvals. For example, we may require additional permits, licenses and approvals to continue diverting water from the Great Salt Lake based on lake conditions or to further expand our production capacity at our SOP facility located near the Great Salt Lake. We may not be granted the necessary permits, licenses and approvals. A decision by a governmental agency to deny, delay issuing or apply conditions to any new permits, licenses and approvals could adversely affect our ability to operate and the results of our operations.

***Compliance with foreign and U.S. laws and regulations applicable to our operations, including the Foreign Corrupt Practices Act (the "FCPA") and other applicable anti-corruption and anti-competition laws, may increase the cost of doing business in international jurisdictions.***

Various laws and regulations associated with our operations are complex and increase our cost of doing business. These laws and regulations include import and export requirements, antitrust laws, anti-competition regulations and anti-corruption laws such

as the FCPA, the Brazilian Clean Companies Act and the U.K. Bribery Act. We cannot predict how these laws or their interpretation, administration and enforcement will change over time. There can be no assurance that our employees, contractors, agents, distributors or customers will not take actions in violation of these laws. Any violations of these laws could subject us to civil or criminal penalties, including fines or prohibitions on our ability to offer our products in one or more countries, debarment from government contracts (and termination of existing contracts) and could also materially damage our reputation, brand, international expansion efforts, business and operating results. In addition, changes to trade or anti-competition could affect our operating practices or impose liability on us in a manner that could materially adversely affect our business, financial condition and results of operations.

***We are subject to EHS laws and regulations which could become more stringent and adversely affect our business.***

Our operations are subject to an evolving set of international, national, federal, foreign, state, provincial and local EHS laws and regulations. New or proposed EHS regulatory programs, as well as future interpretations and enforcement of existing EHS laws and regulations, may require modification to our facilities, require substantial increases in equipment and operating costs, subject us to fines, penalties or lead to interruptions, modifications or a termination of operations, which could involve significant capital costs, increases in operating costs or other significant impacts.

For example, governmental initiatives to limit greenhouse gas emissions under consideration and future initiatives could, if adopted, restrict our operations and require us to make capital expenditures to be compliant with these initiatives. We are also impacted by the Clean Air Act and other EHS laws and regulations that regulate air emissions. These regulatory programs may subject us to fines or penalties or require us to install expensive emissions abatement equipment, modify our operational practices, obtain additional permits or make other expenditures. Our Utah facility is located in an area expected to be of continued scrutiny by the Environmental Protection Agency and Utah Air Quality Board with respect to certain air emissions and related issues under the Clean Air Act.

In addition, if new Clean Water Act regulations are adopted or increased compliance obligations are imposed on existing regulations, we could be adversely affected. For example, a significant portion of our salt products are distributed through salt depots owned and operated by third parties. If these depots are required to adopt more stringent stormwater management practices or are subject to increased compliance requirements under existing Clean Water Act regulations, these depots may pass on any increased costs to us, exit the depot business (requiring us to find new depot partners or establish Company-owned depots) or otherwise cause an adverse impact to our ability to deliver salt to our customers. Additionally, governmental agencies could restrict the use of road salt for highway deicing purposes. See “Business—Environmental, Health and Safety Matters” for more information about EHS laws and regulations affecting us and their potential impact on us.

***We could incur significant environmental liabilities with respect to our current, future or former facilities, adjacent or nearby third-party facilities or off-site disposal locations.***

Risks of environmental liabilities is inherent in our current and former operations. At many of our past and present facilities, releases and disposals of regulated substances have occurred and could occur in the future, which could require us to investigate, undertake or pay for remediation activities under CERCLA and other similar EHS laws and regulations. The use, handling, disposal and remediation of hazardous substances currently or formerly used by us, or the liabilities arising from past releases of, or exposure to, hazardous substances may result in future expenditures that could materially and adversely affect our financial results, cash flows or financial condition. Our facilities are also subject to laws and regulations which require us to monitor and detect potential environmental hazards and damages. Our procedures and controls may not be sufficient to timely identify and protect against potential environmental damages and related costs.

We record accruals for contingent environmental liabilities when we believe it is probable that we will be responsible, in whole or in part, for environmental investigation or remediation activities and the expenditures for these activities are reasonably estimable. For example, we have ongoing investigation and remediation activities at our Kenosha, Wisconsin plant, which are described in Note 12 of our Consolidated Financial Statements. However, the extent and costs of any environmental investigation or remediation activities are inherently uncertain and difficult to estimate and could exceed our expectations, which could materially affect our financial condition and operating results.

Additionally, we previously sold a portion of our U.K. salt mine to a third party, which operates a waste management business. The third party’s business, under governmental permits, is allowed to securely dispose certain hazardous waste at the property they own and they pay us fees for engaging in this activity. We also operate a mercury cell facility at our Igarassu facility. We could incur future expenditures to address risks related to this hazardous waste disposal and mercury use or to remediate any contamination. See “Business—Environmental, Health and Safety Matters” for more information.

***Our intellectual property may be misappropriated or subject to claims of infringement.***

Intellectual property rights, including patents, trademarks, and trade secrets, are a valuable aspect of our business. We attempt to protect our intellectual property rights primarily through a combination of patent, trademark, and trade secret protection. The patent rights that we obtain may not provide meaningful protection to prevent others from selling competitive products or using similar production processes. Pending patent applications may not result in an issued patent. If we do receive an issued patent, we cannot guarantee that our patent rights will not be challenged, invalidated, circumvented, or rendered unenforceable.

We also rely on trade secret protection to guard confidential unpatented technology, manufacturing expertise, and technological innovation. Although we generally enter into confidentiality agreements with our employees, third-party consultants and advisors to protect our trade secrets, we cannot guarantee that these agreements provide meaningful protection or that adequate remedies will be available in the event of an unauthorized use or disclosure of our trade secrets.

Our brand names and the goodwill associated therewith are an important part of our business. We seek to register our brand names as trademarks where it makes business sense. Our trademark registrations may not prevent our competitors from using similar brand names. Many of our brand names are registered as trademarks in the U.S. and foreign countries. The laws in certain foreign countries in which we do business do not protect trademark rights to the same extent as U.S. law. As a result, these factors could weaken our competitive advantage with respect to our products, services and brands in foreign jurisdictions, which could adversely affect our financial performance.

Our intellectual property rights may not be upheld if challenged. Such claims, if proven, could materially and adversely affect our business and may lead to the impairment of the amounts recorded for goodwill and other intangible assets. If we are unable to maintain the proprietary nature of our technologies, we may lose any competitive advantage provided by our intellectual property. In addition, although any such claims may ultimately prove to be without merit, the necessary management attention to and legal costs associated with defending our intellectual property rights could be significant.

***We may face significant product liability claims and product recalls, which could harm our business and reputation.***

We face exposure to product liability and other claims if our products cause harm, are alleged to have caused harm or have the potential to cause harm to consumers. In addition, our products or products manufactured by our customers using our products could be subject to a product recall as a result of product contamination, our failure to meet product specifications or other causes. For example, our customers use our food-grade salt products in food items they produce, such as cheese and bread, which could be subject to a product recall if our products are contaminated or adulterated. Similarly, the use and application of our animal feed and plant nutrition products could result in a product recall if it were alleged that they were contaminated. Additionally, our production and sale of water treatment chemicals and other chemical solutions products could result in contaminants entering waterways and the public water system, leading to significant liabilities and costs.

A product recall could result in significant losses due to the costs of a recall, the destruction of product inventory and production delays to identify the underlying cause of the recall. We could be held liable for costs related to our customers' product recall if our products cause the recall or other product liability claims if our products cause harm to our customers. Additionally, a significant product liability case, product recall or failure to meet product specifications could result in adverse publicity, harm to our brand and reputation and significant costs, which could have a material adverse effect on our business and financial performance.

***We may be negatively impacted if we are unable to obtain required product registrations or if we face increased regulatory requirements.***

Globally, there are directives, laws and regulations that require registration of our products before they can be sold, impose labeling requirements and require our products to be manufactured to certain specifications. Each country, state and province appoints regulatory agencies responsible for these requirements, and many of our products must be registered with these regulatory agencies. A decision to deny the registration of a new product or to delay, revoke or modify an existing product registration may have a material adverse effect on us and could impede our ability to implement our business strategies. In addition, regulatory and labeling requirements could increase, which could require increased expenditures. For example, many regulatory agencies continue to evaluate potential health and environmental impacts that could arise from the handling and use of new and existing plant nutrition products. These evaluations or other developments could result in additional regulatory requirements for plant nutrition producers, including us, or for our customers, and could negatively impact the demand for our products.

***We may be adversely affected by changes in laws, industry standards and regulatory requirements.***

Our global business is subject to the requirements of federal, state, local and foreign laws, regulations and regulatory authorities as well as industry standard-setting authorities. Changes in the standards and requirements imposed by these laws, regulations and authorities or adoption of any new laws or regulations could negatively affect our ability to serve our customers or our business. In the event that we are unable to meet any new or modified standards when adopted, our business could be adversely affected.

For example, if significant import duties were imposed on the salt we import into the U.S. from our Goderich mine, or if we were unable to include the transfer price of such salt in the cost of goods sold for tax purposes, our financial condition and operating results would be materially adversely affected. We could also be adversely impacted by changes in tariffs imposed by countries, which could increase competition in markets where we sell our products. In addition, failure to comply with applicable laws and regulations or to comply with any of contracts we have with governmental entities could preclude us from conducting business with governmental entities and lead to penalties, injunctions, civil remedies or fines.

**Strategic and General Business Risks**

***We may not successfully implement our strategies.***

Our success depends, to a significant extent, on successful implementation of our business strategies, including our growth strategy, our efforts to increase the balance between our salt and plant nutrition businesses, our cost savings initiatives and the other strategies described in the “Business” section of this report. We cannot assure that we will be able to successfully implement our strategies or, if successfully implemented, we may not realize the expected benefits of our strategies. Although we make substantial investments in product innovation, we cannot be certain that we will be able to develop, obtain or successfully implement new products or technologies on a timely basis or that they will be well-received by our customers. Moreover, our investments in new products and technologies involve certain risks and uncertainties and could disrupt our ongoing business. New investments may not generate sufficient revenue, may incur unanticipated liabilities and may divert our limited resources and distract management from our current operations. We cannot be certain that our ongoing investments in new products and technologies will be successful, will meet our expectations and will not adversely affect our reputation, financial condition and operating results.

***Our business is dependent upon highly skilled personnel, and the loss of key personnel may have a material adverse effect on our performance.***

Our business is dependent on our ability to attract, develop and retain highly skilled personnel. We may not be able to attract, develop and retain the personnel necessary for the efficient operation of our business, and our inability to do so could result in decreased productivity and efficiency, higher costs, the use of less-qualified personnel and reputational harm, which may have a material adverse effect on our performance. In addition, we are currently conducting a search for a President and Chief Executive Officer. The transition to a new President and Chief Executive Officer may be disruptive to our operations and create uncertainty about our business and future direction, which could materially adversely affect our business. Until a new President and Chief Executive Officer is identified, it may be more difficult for us to hire and retain other key personnel.

To help attract, retain and motivate qualified personnel, we use stock-based incentive awards such as employee stock options, restricted stock units and performance stock units. If the value of these stock awards does not appreciate as measured by our common stock price, performance conditions in these awards are not met or if our stock-based compensation otherwise ceases to be viewed as a valuable benefit, our ability to attract, retain and motivate personnel could be weakened, which could harm our business.

The loss of certain key employees could damage critical customer relationships, result in the loss of vital institutional knowledge, experience and expertise, and impact our ability to successfully operate our business and execute our business strategy. We may not be able to find qualified replacements for these key positions and the integration of replacements may be disruptive to our business. In addition, the loss of our key employees who have in depth knowledge of our research and development, mining, manufacturing or engineering processes could lead to increased competition to the extent that those employees are hired by a competitor and are able to recreate our processes or share our confidential information.

***If our computer systems, information technology or operations technology are compromised, our ability to conduct our business will be adversely impacted.***

We rely on computer systems, information technology and operations technology to conduct our business, including cash management, order entry, invoicing, plant operations, vendor payments, employee salaries and recordkeeping, inventory and asset management, shipping of products, and communication with employees and customers. We also use our systems to analyze and communicate our operating results and other data to internal and external recipients. We continue to make updates and improvements to our enterprise resource planning system, network and other core applications, which could impact substantially all of our key processes. Any implementation issues could have adverse effects on our ability to properly capture, process and report financial transactions, distribute our products, invoice and collect from our customers and pay our vendors and could lead to increased expenditures or operational disruptions.

We are susceptible to cyber-attacks, computer viruses and other technological disruptions, which continue to increase due to evolving threats and our expanding information technology footprint. We have experienced attempts by unauthorized agents to gain access to our computer systems through the internet, e-mail and other access points. To date, none have resulted in any material adverse impact to our business or operations. While we have programs, policies and procedures in place to identify, prevent and detect any unauthorized access, this does not guarantee that we will be able to detect or prevent unauthorized access to our computer systems. A material failure or interruption of access to our computer systems for an extended period of time or the loss of confidential or proprietary data could adversely affect our operations, reputation and regulatory compliance. While we have mitigation and data recovery plans in place, it is possible that significant expenditures, capital investments and time may be required to correct any of these issues. Additional capital investment and expenditures needed to address, prevent, correct or respond to any of these issues may negatively impact our business, financial condition and results of operations.

***We may not be able to expand our business through acquisitions, and acquisitions may not perform as expected. We may not successfully integrate acquired businesses and anticipated benefits may not be realized.***

Our business strategy includes supplementing organic growth with acquisitions of complementary businesses. We may not have acquisition opportunities because we may not identify suitable businesses to acquire, we compete with other potential buyers, we may not have or be able to obtain suitable financing for an acquisition and we may be hindered by competition and regulatory laws. If we cannot make acquisitions, our business growth may be limited.

Acquisitions of new businesses may not perform as expected, may not positively impact our financial performance and could increase our debt obligations. Acquisitions involve significant risks and uncertainties, including diversion of management attention, greater than expected liabilities and expenses, inadequate return of capital and unidentified issues not discovered in our due diligence.

Our ability to realize benefits from our October 2016 Produquímica acquisition depends on several factors, including the growth and health of the Brazilian and international agribusiness industry, weather conditions, our ability to innovate and develop new products, the continued demand for innovative specialty plant nutrition products and successful geographical expansion inside and outside Brazil. We may not successfully implement our proposed business strategies, which could cause a material adverse effect on our business, financial condition and results of operations.

The success of any acquisition will also depend on our ability to successfully combine and integrate the acquired business. We may fail to integrate acquired businesses in a timely and efficient manner. The integration process could result in the loss of key employees, higher than expected costs, ongoing diversion of management attention from other strategic opportunities or operational matters, the disruption of our ongoing businesses or increased risk that our internal controls are found to be ineffective.

***Future climate change could adversely affect us.***

The potential impact of climate change on our operations, product demand and the needs of our customers remains uncertain. Scientists have proposed that the impacts of climate change could include changes in rainfall patterns, water shortages, changing sea levels, changing storm patterns and intensities and changing temperature levels. These changes could be severe and vary by geographic location. These changes could negatively impact customer demand for our products and our costs and ability to produce our products. For example, prolonged period of mild winter weather could reduce the market for deicing products. Drought conditions could similarly impact demand for our plant nutrition products. In addition, potential climate change regulations or other carbon or emissions taxes could result in higher costs. Our inability to timely respond to the risks posed by climate change could have a material impact on us.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

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None.

**ITEM 2. PROPERTIES**

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Information regarding our plants and properties is included in the “Business” section of this report.

**ITEM 3. LEGAL PROCEEDINGS**

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We are involved in the legal proceedings described in Note 8 and Note 12 to our Consolidated Financial Statements and, from time to time, various routine legal proceedings and claims arising from the ordinary course of our business. These primarily involve tax assessments, disputes with former employees and contract labor, commercial claims, product liability claims, personal injury claims and workers’ compensation claims. Management cannot predict the outcome of legal proceedings and claims with certainty. Nevertheless, management believes that the outcome of legal proceedings and claims, which are pending or known to be threatened, even if determined adversely, will not, either individually or in the aggregate, have a material adverse effect on our results of operations, cash flows or financial condition.

**ITEM 4. MINE SAFETY DISCLOSURES**

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Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this report.

**Executive Officers of the Registrant**

The following table sets forth the name and position of each person who is an executive officer as of December 31, 2018, and as of the date of the filing of this report. The table sets forth each person’s age as of the date of the filing of this report.

Name	Age	Position
Richard S. Grant	72	Interim President and Chief Executive Officer and Chairman of the Board
James D. Standen	43	Chief Financial Officer
S. Bradley Griffith	51	Senior Vice President, Plant Nutrition
Angela Y. Jones	55	Senior Vice President, People and Culture
Anthony J. Sepich	48	Senior Vice President, Salt
Diana C. Toman	40	Senior Vice President, General Counsel and Corporate Secretary

**Richard S. Grant, Interim President and Chief Executive Officer**, has been serving in his current position since November 2018. Mr. Grant has also served as Chairman of the Board since November 2018 and has been a member of the Company's Board of Directors since April 2004. From 1998 until his retirement in 2002, Mr. Grant served as Chief Executive of BOC Process Gas Solutions, a global business providing utilities and services primarily to the chemical, petrochemical and metals industries. Concurrently, he served as a director of the BOC Group plc and Chairman of CNC sa, a Mexican joint venture. Mr. Grant was a director of BlueLinx Holdings, Inc., a publicly traded distributor of building products, from 2005 to 2017. Mr. Grant also served as the Company's Lead Independent Director from the creation of the position in 2005 to November 2018, except during his short service as Compass Minerals' Interim Chief Executive Officer from December 2012 to January 2013.

**James D. Standen, Chief Financial Officer**, joined Compass Minerals in March 2006 and assumed his current position in August 2017. Prior to this position, Mr. Standen served as the Company's Interim Chief Financial Officer and Treasurer starting in April 2017. He also served as the Company's Vice President, Finance and Treasurer from October 2016 to April 2017, as Treasurer from July 2011 to October 2016 and as Assistant Treasurer from April 2006 to June 2011. Prior to joining the Company, Mr. Standen spent six years at Kansas City Southern in various finance roles after spending two years with the public accounting firm Mayer Hoffman McCann P.C.

**S. Bradley Griffith, Senior Vice President, Plant Nutrition**, joined Compass Minerals and assumed his current position in August 2016. Before joining Compass Minerals, Mr. Griffith spent eight years at Monsanto Company, a global provider of agricultural products. While at Monsanto, he held various positions, including Vice President, Global Strategic Accounts, Vice President, Global Microbials and Vice President, Western Business Unit (USA Row Crops). Prior to Monsanto, Mr. Griffith held a number of pharmaceutical and medical sales roles, most recently at Sanofi.

**Angela Y. Jones, Senior Vice President, People and Culture**, joined Compass Minerals in January 2018 and assumed her current position in September 2018. Prior to her current position, Ms. Jones served as the Company's Vice President, Human Resources. Prior to joining the Company, Ms. Jones, served as Vice President, Human Resources at both Rembrandt Enterprises from 2016 to 2018 and at ConAgra Brands, Inc. from 2007 to 2016. Prior to ConAgra Brands, Ms. Jones gained significant operations experience, with roles such as Director of Operations and Plant General Manager for The Clorox Company as well as progressively responsible supply chain and operations roles with Proctor & Gamble.

**Anthony J. Sepich, Senior Vice President, Salt**, joined Compass Minerals and assumed his current role in November 2016. Mr. Sepich came to Compass Minerals from Archer Daniels Midland Company ("ADM"), one of the world's largest agricultural processors, where he most recently served as President of ADM Corn Europe. He joined ADM in 1997 and served in a number of capacities, primarily in ADM's cocoa division, where he held positions in risk management and sales, including Vice President of Sales.

**Diana C. Toman, Senior Vice President, General Counsel and Corporate Secretary**, joined Compass Minerals and assumed her current role in November 2015. From March 2010 to October 2015, Ms. Toman worked at General Cable Corporation, a global wire and cable manufacturing company, most recently as Vice President, Strategy and General Counsel, Asia Pacific and Africa based in Thailand. Ms. Toman served as legal counsel with increasing levels of responsibility at Gardner Denver, Inc. from 2006 to 2010 and Waddell & Reed Financial, Inc. from 2003 to 2006. She began her career as an attorney with the law firm of Levy & Craig, P.C.

**PART II****ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES****COMMON STOCK DATA**

Our common stock, \$0.01 par value, trades on the New York Stock Exchange under the symbol CMP.

**HOLDERS**

On February 25, 2019, the number of holders of record of our common stock was 121.

**DIVIDEND POLICY**

We intend to pay quarterly cash dividends on our common stock. The declaration and payment of future dividends to holders of our common stock will be at the discretion of our board of directors and will depend upon many factors, including our financial condition, earnings, legal requirements, restrictions in our debt agreements and other factors our board of directors deems relevant.

**EQUITY COMPENSATION PLAN INFORMATION**

The following table sets forth information at December 31, 2018, concerning our common stock authorized for issuance under our equity compensation plans:

<b>Plan category</b>	<b>Number of shares to be issued upon exercise of outstanding securities</b>	<b>Weighted-average exercise price of outstanding securities</b>	<b>Number of securities available for issuance under plan</b>
Equity compensation plans approved by shareholders:			
Stock options	708,746	\$ 70.76	
Restricted stock units	83,308	N/A	
Performance stock units	126,638	N/A	
Deferred stock units	99,274	N/A	
Total securities under approved plans <sup>(a)</sup>	1,017,966		1,672,160
Equity compensation plans not approved by shareholders <sup>(b)</sup> :			
Deferred stock units	17,775	N/A	
<b>Total</b>	<b>1,035,741</b>		<b>1,672,160</b>

(a) In 2015, shareholders approved the 2015 Incentive Award Plan. No new awards will be made under the 2005 Incentive Award Plan subsequent to the approval of the 2015 Incentive Award Plan.

(b) Prior to 2008, non-employee directors were issued common stock and deferred stock units in connection with their service as a director under the 2004 Directors Deferred Share Plan. In 2008, we began issuing non-employees director shares of common stock and deferred stock units under equity plans approved by shareholders. No new awards will be granted under the 2004 Directors Deferred Share Plan.

**ITEM 6. SELECTED FINANCIAL DATA**

The information included in the following table should be read in conjunction with “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and the Consolidated Financial Statements and accompanying Notes thereto included elsewhere in this report.

(Dollars in millions, except share data)	For the Year Ended December 31,				
	2018	2017	2016	2015	2014
<b>Statement of Operations Data:</b>					
Sales	\$ 1,493.6	\$ 1,364.4	\$ 1,138.0	\$ 1,098.7	\$ 1,282.5
Shipping and handling cost	320.0	267.5	244.9	261.5	337.7
Product cost <sup>(a)(c)</sup>	757.6	661.5	509.4	433.1	449.1
Depreciation, depletion and amortization <sup>(b)</sup>	136.9	122.2	90.3	78.3	78.0
Selling, general and administrative expenses	163.6	167.4	124.9	108.7	110.4
Operating earnings <sup>(c)</sup>	130.3	159.2	174.6	221.4	311.0
Interest expense	62.5	52.9	34.1	21.5	20.1
Net earnings from continuing operations <sup>(c)</sup>	68.8	42.7	162.7	159.2	217.9
Net earnings available for common stock <sup>(c)</sup>	68.3	42.2	161.9	158.2	216.4
<b>Share Data:</b>					
Weighted-average common shares outstanding (in thousands):					
Basic	33,848	33,819	33,776	33,677	33,557
Diluted	33,848	33,820	33,780	33,692	33,581
Net earnings from continuing operations per share:					
Basic	\$ 2.02	\$ 1.25	\$ 4.79	\$ 4.70	\$ 6.45
Diluted	2.02	1.25	4.79	4.69	6.44
Cash dividends declared per share	2.88	2.88	2.78	2.64	2.40
<b>Balance Sheet Data (at year end):</b>					
Total cash and cash equivalents	\$ 27.0	\$ 36.6	\$ 77.4	\$ 58.4	\$ 266.8
Total assets <sup>(d)</sup>	2,367.9	2,571.0	2,466.5	1,624.8	1,632.2
Total debt <sup>(d)</sup>	1,364.7	1,362.5	1,325.0	722.9	621.4

(a) “Product cost” is presented exclusive of depreciation, depletion and amortization.

(b) Depreciation, depletion and amortization include amounts also included in selling, general and administrative expenses.

(c) In the fourth quarter of 2018, we incurred costs of \$5.1 million related to the transition of our Chief Executive Officer. Also in 2018, we recorded a tax benefit of \$3.0 million related to the U.S. Tax Cuts and Jobs Act, the release of \$7.2 million of valuation allowances related to our Brazil business and incurred \$3.4 million of tax expense related to the repatriation of approximately \$150 million. In the fourth quarter of 2017, we recorded a net charge of \$46.8 million in connection with the U.S. Tax Cuts and Jobs Act and \$13.8 million related to a tax settlement with the U.S. and Canadian tax authorities. In addition, we released approximately \$25 million of valuation allowances related to our Brazilian deferred tax assets (see Note 8 to our Consolidated Financial Statements for further discussion regarding these items). In the fourth quarter of 2016, we recognized a gain of \$59.3 million related to the remeasurement of our previously held equity investment in Produquímica (see Note 4 to our Consolidated Financial Statements). In the third quarter of 2014, we recognized a gain of \$83.3 million (\$60.6 million, net of taxes) from an insurance settlement relating to damage sustained as a result of a tornado that struck our rock salt mine and evaporation plant in Goderich, Ontario in 2011. We recognized \$82.3 million of the gain in product cost and \$1.0 million of the gain in selling, general and administrative expenses in the Consolidated Statements of Operations.

(d) In 2016, we adopted guidance which requires the presentation of debt issuance costs as a reduction to debt rather than in assets. Prior years have been adjusted to reflect this change.

## ITEM 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The statements in this discussion regarding the industry outlook, our expectations for the future performance of our business, and the other non-historical statements in this discussion are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described in “Risk Factors.” You should read the following discussion together with “Risk Factors” and the Consolidated Financial Statements and Notes thereto included elsewhere in this report.

### COMPANY OVERVIEW

Compass Minerals is a leading provider of essential minerals that solve nature’s challenges, including salt for winter roadway safety and other consumer, industrial and agricultural uses; specialty plant nutrition minerals that improve the quality and yield of crops; and specialty chemicals for water treatment and other industrial processes. As of December 31, 2018, we operated 22 production and packaging facilities, including:

- The largest rock salt mine in the world in Goderich, Ontario, Canada;
- The largest dedicated rock salt mine in the U.K. in Winsford, Cheshire;
- A solar evaporation facility located near Ogden, Utah, which is both the largest SOP specialty fertilizer production site and the largest solar salt production site in the Western Hemisphere;
- Several mechanical evaporation facilities producing consumer and industrial salt; and
- Multiple facilities producing essential agricultural nutrients and specialty chemicals in Brazil.

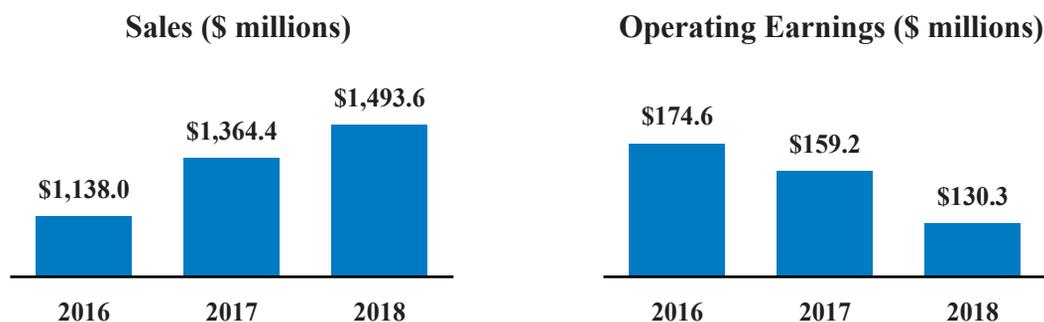
Our salt business provides highway deicing salt to customers in North America and the U.K. as well as consumer deicing and water conditioning products, ingredients used in consumer and commercial food preparation, and other salt-based products for consumer, agricultural and industrial applications in North America. In the U.K., we operate a records management business utilizing excavated areas of our Winsford salt mine with one other surface location in London, England.

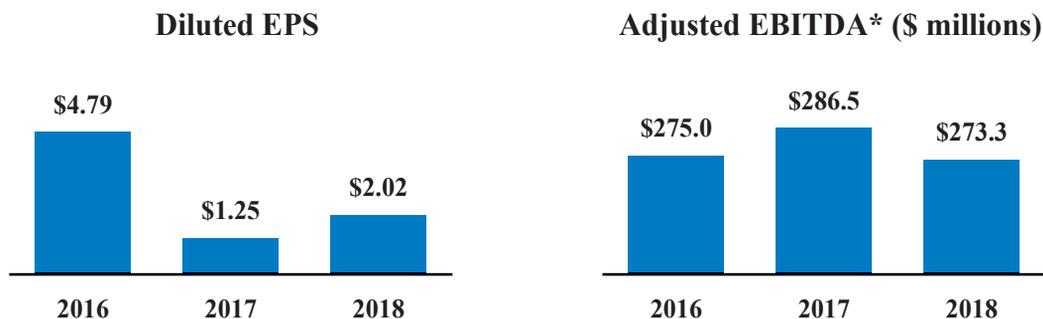
Our plant nutrition business produces and markets specialty plant nutrition products worldwide to distributors and retailers of crop inputs, as well as growers. Our principal plant nutrition product in our Plant Nutrition North America segment is SOP, which we market under the trade name Protassium+. We also sell various premium micronutrient products under our Wolf Trax brand.

Our Plant Nutrition South America segment operates two primary businesses in Brazil—agricultural productivity, which manufactures and distributes a broad offering of specialty plant nutrition solution-based products, and chemical solutions, which manufactures and markets specialty chemicals, primarily for the water treatment industry and for use in other industrial processes (see Note 4 to our Consolidated Financial Statements for more information).

We focus on building intrinsic value by growing our earnings before interest, taxes, depreciation and amortization (“EBITDA”) and by improving our asset quality. We can employ our operating cash flow and other sources of liquidity to pay dividends, re-invest in our business, pay down debt and make acquisitions.

### Consolidated Results of Operations





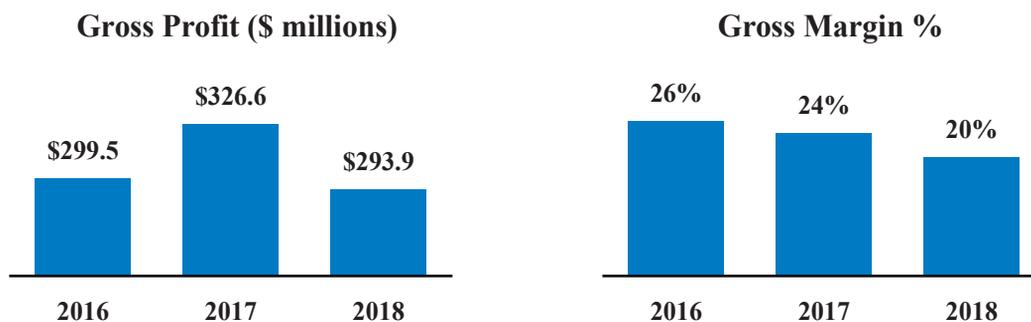
\* Refer to “—Sensitivity Analysis Related to EBITDA and Adjusted EBITDA” for a reconciliation to the most directly comparable GAAP financial measure and the reasons we use this non-GAAP measure.

#### CONSOLIDATED RESULTS COMMENTARY: 2017 – 2018

- Total sales increased 9%, or \$129.2 million, due to increases in all segments.
- Operating earnings decreased 18%, or \$28.9 million, due to lower Salt, Plant Nutrition North America and corporate and other operating earnings.
- Diluted earnings per share increased 62%, or \$0.77. Diluted earnings per share in 2018 was negatively impacted by \$5.1 million due to expenses incurred related to the transition of our Chief Executive Officer (“CEO”). Diluted earnings per share in 2017 was negatively impacted by a charge of \$46.8 million for the impact of the U.S. Tax Cuts and Jobs Act legislation enacted in December 2017 and other tax-related items (see Note 8 to our Consolidated Financial Statements).
- EBITDA\* adjusted for items management believes are not indicative of our ongoing operating performance (“Adjusted EBITDA”)\* decreased 5%, or \$13.2 million.

#### CONSOLIDATED RESULTS COMMENTARY: 2016 – 2017

- Total sales increased 20%, or \$226.4 million, due to the impact of a full year of Produquímica sales and an increase in Plant Nutrition North America segment sales. This increase was partially offset by a decline in Salt segment sales.
- Operating earnings decreased 9%, or \$15.4 million, due to lower Salt segment operating earnings, partially offset by the inclusion of Produquímica in our operating results and an increase in Plant Nutrition North America operating earnings.
- Diluted earnings per share decreased 74%, or \$3.54. Diluted earnings per share in 2017 was negatively impacted by a charge of \$46.8 million related to U.S. tax reform. In contrast, 2016 diluted earnings per share was positively impacted by a \$59.3 million gain as a result of remeasuring our prior equity investment in Produquímica held before the business combination (see Note 4 to our Consolidated Financial Statements).
- Adjusted EBITDA\* increased 4%, or \$11.5 million.



**GROSS PROFIT & GROSS MARGIN COMMENTARY: 2017 – 2018*****Gross Profit: Decreased 10%, or \$32.7 million; Gross Margin decreased 4 percentage points to 20% from 24%***

- Salt segment gross profit decreased \$24.7 million primarily due to higher per-unit costs at our Goderich mine resulting from the strike at the mine that began in April 2018 and ended in July 2018 and higher per-unit shipping and handling costs partially offset by higher sales.
- The plant nutrition business, on a combined basis, was responsible for \$7.8 million of the decrease in gross profit.
- Gross profit for Plant Nutrition North America decreased \$2.0 million due primarily to higher depreciation expense during 2018, which was partially offset by higher sales volumes. Gross profit for Plant Nutrition South America decreased \$5.8 million due primarily to a weaker Brazilian real compared to the U.S. dollar, which was partially offset by higher sales prices and volumes.

**GROSS PROFIT & GROSS MARGIN COMMENTARY: 2016 – 2017*****Gross Profit: Increased 9%, or \$27.1 million; Gross Margin decreased 2 percentage points to 24% from 26%***

- The plant nutrition business, on a combined basis, contributed \$86.0 million to the increase in gross profit primarily due to the full-year inclusion of Produquímica in our operating results.
- Gross profit for Plant Nutrition North America was favorably impacted by higher sales volumes and lower per-unit product costs, which were partially offset by increased per-unit shipping and handling costs and higher depreciation expense during 2017.
- A \$61.6 million decrease in Salt segment gross margin partially offset the combined plant nutrition business' increase. The decrease resulted from lower sales volumes, increased per-unit product and increased shipping and handling costs, and higher depreciation expense.

**OTHER EXPENSES AND INCOME COMMENTARY: 2017 – 2018*****SG&A: Decreased \$3.8 million; Decreased 1.3 percentage points as a percentage of sales to 11.0% from 12.3%***

- The decrease in SG&A expense was primarily due to a weaker Brazilian real compared to the U.S. dollar and lower professional service fees in all three of our segments. The decrease in SG&A expense was partially offset by higher restructuring costs in 2018 due to CEO transition costs of \$5.1 million and higher depreciation expense related to a significant software system upgrade implemented in the second half of 2017.

***Interest Expense: Increased \$9.6 million to \$62.5 million***

- The increase was primarily due to higher U.S. interest rates and an increase in borrowings under our revolving credit facility.

***Net Earnings in Equity Investee: Increased from \$0.8 million to \$1.0 million***

- Net earnings in our equity investee increased by \$0.2 million to \$1.0 million.

***Other (Income) Expense, Net: Improved \$13.2 million from expense of \$4.4 million to income of \$8.8 million***

- The increase was primarily due to foreign exchange gains of \$5.8 million in 2018, compared to losses of \$7.1 million in 2017.

***Income Tax Expense: Decreased \$51.2 million to \$8.8 million***

- Income tax expense and our income tax rate decreased in 2018 due to \$60.6 million recorded in 2017 related to U.S. tax reform and a tax settlement agreement, partially offset by the release of valuation allowances related to our Brazil business.
- Our effective tax rate decreased from 58% in 2017 to 11% in 2018. Our effective tax rates were impacted by U.S. tax reform and a tax settlement agreement in 2017 and the release of valuation allowances in 2018 related to our Brazil business.
- Our income tax provision in both periods differs from the U.S. statutory rate primarily due to U.S. statutory depletion, state income taxes, foreign income, mining and withholding taxes and interest expense recognition differences for tax and financial reporting purposes.

**OTHER EXPENSES AND INCOME COMMENTARY: 2016 – 2017*****SG&A: Increased \$42.5 million, which represented a 1.3 percentage points of sales increase to 12.3% from 11.0%***

- The increase in SG&A expense was primarily due to the full year inclusion of Produquímica in our operating results in 2017 and approximately \$2 million in higher corporate depreciation related to a significant software system upgrade.

- In addition, we incurred charges of approximately \$2 million related to ongoing restructuring activities primarily impacting corporate SG&A.

***Interest Expense: Increased \$18.8 million to \$52.9 million***

- The increase was primarily due to our higher aggregate debt level driven by the acquisition of Produquímica, which was partially offset by lower interest rates due to the refinancing of our term loans and revolving credit facility in April 2016.

***Net (Earnings) Loss in Equity Investee: Increased from a loss of \$1.4 million to earnings of \$0.8 million***

- The \$0.8 million of earnings in 2017 represents our share of Fermavi Eletroquímica Ltda.'s ("Fermavi") net earnings. As a result of the full acquisition of Produquímica, we hold a 50% interest in Fermavi, which was previously held by Produquímica.
- The \$1.4 million loss in 2016 was primarily comprised of our share of Produquímica's net loss based on our initial 35% equity interest in Produquímica prior to the full acquisition.

***Gain from Remeasurement of Equity Method Investment***

- We recognized a gain of \$59.3 million in 2016 related to our previously held equity investment in Produquímica, which was remeasured to fair value upon our full acquisition of the business in October 2016.

***Other Expense (Income), Net: Increased \$3.3 million to \$4.4 million***

- The increase was primarily due to foreign exchange losses of \$7.1 million in 2017, compared to losses of \$0.1 million in 2016.
- The increase was partially offset by the inclusion of \$3.0 million of refinancing fees in 2016 and increased interest income in 2017.

***Income Tax Expense: Increased \$25.4 million to \$60.0 million***

- Income tax expense and our income tax rate increased in 2017 due to the impact of U.S. tax reform, which resulted in an increase in tax expense of \$46.8 million, and due to a tax settlement agreement. These increases were partially offset by the release of valuation allowances related to our Brazil business.
- Our effective tax rate was 58% in 2017 and 18% in 2016. Our effective tax rates were impacted by U.S. tax reform and a tax settlement agreement in 2017 and the non-taxable gain recognized from the remeasurement of our previously held equity investment in Produquímica in 2016.
- Our income tax provision in both periods differs from the U.S. statutory rate primarily due to U.S. statutory depletion, domestic manufacturing deductions, state income taxes, foreign income, mining and withholding taxes and interest expense recognition differences for tax and financial reporting purposes.

## **OPERATING SEGMENT PERFORMANCE**

The following financial results represent consolidated financial information with respect to sales from our Salt, Plant Nutrition North America and Plant Nutrition South America segments for the years ended December 31, 2018, 2017 and 2016. Sales primarily include revenue from the sales of our products, or "product sales," and the impact of shipping and handling costs incurred to deliver our salt and plant nutrition products to our customers.

The results of operations of the consolidated records management business and other incidental revenues include sales of \$10.5 million, \$10.2 million and \$9.6 million for 2018, 2017 and 2016, respectively. These revenues are not material to our consolidated financial results and are not included in the following operating segment financial data.

## SALT SEGMENT RESULTS

	2018	2017	2016
<b>Salt Sales (in millions)</b>	\$ 858.1	\$ 769.2	\$ 811.9
<b>Salt Operating Earnings (in millions)</b>	\$ 115.7	\$ 138.0	\$ 200.6
<b>Salt Sales Volumes (thousands of tons)</b>			
Highway deicing	9,597	8,565	8,966
Consumer and industrial	2,030	2,035	2,147
<b>Total tons sold</b>	<b>11,627</b>	<b>10,600</b>	<b>11,113</b>
<b>Average Salt Sales Price (per ton)</b>			
Highway deicing	\$ 55.44	\$ 53.13	\$ 54.73
Consumer and industrial	\$ 160.65	\$ 154.34	\$ 149.63
Combined	\$ 73.80	\$ 72.56	\$ 73.06

## SALT SEGMENT RESULTS COMMENTARY: 2017 – 2018

- Salt sales increased 12%, or \$88.9 million, due to sales increases in both businesses.
- Salt sales volumes increased 10%, or 1,027,000 tons, and contributed approximately \$54 million to the increase in Salt segment sales. Highway deicing sales volumes increased 12% as a result of significantly above average winter weather in the U.K. and more winter weather events in North America in the first quarter of 2018 compared to the same period in 2017. Consumer and industrial sales volumes were essentially flat with the prior year.
- Salt average sales price increased 2% and contributed approximately \$35 million to the increase in Salt segment sales as average sales prices were higher in both businesses. Salt average sales price was negatively impacted by product mix as highway deicing products, which have a lower average sales price than consumer and industrial products, were a higher proportion of total sales in 2018.
- Highway deicing average sales prices increased 4%, primarily as a result of the realization of higher North American highway deicing bid prices for the 2018-2019 winter season in the fourth quarter of 2018 reflecting tighter salt supply following a more typical winter season as compared to the prior weak winter season. Consumer and industrial average sales prices increased 4% due to price increases introduced over the last year and an improvement in product sales mix.
- Salt operating earnings decreased 16%, or \$22.3 million, due to higher per-unit product and logistics costs in North America as well as higher-cost inventory produced in 2017 and sold in 2018 compared to a lower-cost 2017 beginning inventory. The higher per-unit product and logistics costs resulted primarily from lower Goderich mine production levels and higher carryover inventory costs due the Goderich mine ceiling fall in the second half of 2017 and lower production levels at the Goderich mine related to the strike at the mine that began in April 2018 and ended in July 2018. The reduced inventory levels led to higher costs as a result of purchased salt and higher logistics costs to move salt into markets typically served by our Goderich mine. This decrease in operating earnings was partially offset by a restructuring charge of approximately \$2 million that occurred in 2017.

## SALT SEGMENT RESULTS COMMENTARY: 2016 – 2017

- Salt sales decreased 5%, or \$42.7 million, due to lower highway deicing and consumer and industrial sales volumes and lower highway deicing average sales prices. This decrease was partially offset by higher consumer and industrial average sales prices.
- Salt sales volumes decreased 5%, or 513,000 tons, and contributed approximately \$39 million to the decline in Salt segment sales. Highway deicing sales volumes decreased 4% and consumer and industrial sales volumes decreased 5% primarily due to the carryover impact of two consecutive mild winters, which resulted in increased customer deicing inventories.

- Salt average sales price decreased 1% and contributed approximately \$4 million to the decrease in Salt segment sales. The decrease in average sales price was due to a decrease in highway deicing average sales prices, partially offset by an increase in consumer and industrial average sales prices.
- Highway deicing average sales prices decreased 3% primarily as a result of lower North American highway deicing bid prices for the 2016-2017 winter season partially offset by favorable geographic sales mix in the fourth quarter of 2017. Consumer and industrial average sales prices increased 3% due to price increases introduced in 2016 as well as an improvement in product sales mix.
- Salt operating earnings decreased 31%, or \$62.6 million, primarily due to higher per-unit product and logistics costs, lower average sales prices and higher depreciation expense.
- We experienced lower mine operating rates throughout 2016 due to high deicing inventory and unplanned downtime at our Goderich mine in the fourth quarter of 2016, which increased 2017 per-unit product costs.
- In addition, results include restructuring costs related to our cost savings initiatives of approximately \$2 million during 2017.

#### PLANT NUTRITION NORTH AMERICA RESULTS

	2018	2017	2016
<b>Plant Nutrition North America Sales (in millions)</b>	\$ 233.2	\$ 210.0	\$ 203.0
<b>Plant Nutrition North America Operating Earnings (in millions)</b>	\$ 25.3	\$ 27.7	\$ 21.1
<b>Plant Nutrition North America Sales Volumes (thousands of tons)</b>	362	327	313
<b>Plant Nutrition North America Average Sales Price (per ton)</b>	\$ 645	\$ 642	\$ 648

#### PLANT NUTRITION NORTH AMERICA RESULTS COMMENTARY: 2017 – 2018

- Plant Nutrition North America sales increased 11%, or \$23.2 million, due primarily to higher sales volumes.
- Plant Nutrition North America sales volumes increased 11%, or 35,000 tons, and contributed approximately \$22 million to the increase in sales. The sales volumes increase resulted from increases in both SOP and micronutrient volumes.
- Plant Nutrition North America average sales prices were essentially flat and contributed approximately \$1 million to the increase in sales.
- Plant Nutrition North America operating earnings decreased 9%, or \$2.4 million, primarily due to an increase in depreciation expense associated with commissioning new production assets at our Utah facility and additional potassium chloride feedstock used to boost SOP production during the first half of 2018. The decrease was partially offset by lower logistics costs and a restructuring charge of approximately \$1 million that occurred in 2017.

#### PLANT NUTRITION NORTH AMERICA RESULTS COMMENTARY: 2016 – 2017

- Plant Nutrition North America sales increased 3%, or \$7.0 million, primarily due to higher sales volumes partially offset by lower average sales prices.
- Plant Nutrition North America sales volumes increased 4%, or 14,000 tons, and contributed approximately \$9 million to the increase in sales as the North American SOP market stabilized during 2017
- Plant Nutrition North America average sales price decreased 1% which partially offset the increase in sales by approximately \$2 million.
- Plant Nutrition North America operating earnings increased 31%, or \$6.6 million, primarily due to a reduction in per-unit product costs, the impact of which was partially offset by unfavorable logistics costs, higher depreciation expense and approximately \$1 million of restructuring costs.

## PLANT NUTRITION SOUTH AMERICA RESULTS

	2018	2017	2016
<b>Plant Nutrition South America Sales (in millions)</b>	\$ 391.8	\$ 375.0	\$ 113.5
<b>Plant Nutrition South America Operating Earnings (in millions)</b>	\$ 48.7	\$ 49.1	\$ 7.4
<b>Plant Nutrition South America Sales Volumes (thousands of tons)</b>			
Agricultural productivity	461	432	122
Chemical solutions	300	289	72
<b>Total tons sold</b>	<b>761</b>	<b>721</b>	<b>194</b>
<b>Average Plant Nutrition South America Sales Price (per ton)</b>			
Agricultural productivity	\$ 644	\$ 632	\$ 713
Chemical solutions	\$ 316	\$ 351	\$ 372
Combined	\$ 515	\$ 520	\$ 587

### PLANT NUTRITION SOUTH AMERICA RESULTS COMMENTARY: 2017 – 2018

- Plant Nutrition South America sales increased 4% or \$16.8 million.
- Plant Nutrition South America sales volumes increased 6%, or 40,000 tons, and contributed approximately \$22 million to the increase in Plant Nutrition South America sales. Agricultural productivity sales volumes increased 7% primarily as a result of improved crop economics in Brazil versus the prior year. Chemical solutions sales volumes increased 4% due to higher demand for chlor-alkali products.
- A 1% decrease in Plant Nutrition South America average sales price partially offset the sales increase by approximately \$5 million. The decrease in average sales price was primarily due to a 10% decrease in chemical solutions average prices, partially offset by a 2% increase in agricultural productivity product prices. The decrease in average sales prices was due to a weaker Brazilian real versus the U.S. dollar partially offset by a favorable shift in product sales mix.
- Plant Nutrition South America operating earnings decreased 1%, or \$0.4 million, primarily due to a weaker Brazilian real versus the U.S. dollar and a \$1.9 million gain recognized in the first quarter of 2017 related to the settlement of contingent consideration for the acquisition of Produquímica. In local currency, operating earnings increased 22% over 2017 results as higher sales were partially offset by higher commodity costs.

### PLANT NUTRITION SOUTH AMERICA RESULTS COMMENTARY: 2016 – 2017

- Financial results for 2016 represent consolidated financial information with respect to our Plant Nutrition South America segment from October 3, 2016, the Produquímica acquisition date, through December 31, 2016. As such, 2016 results are not comparable to full-year 2017 consolidated financial results.
- Plant Nutrition South America's operating results are impacted by seasonality. Sales volumes are usually higher in the third and fourth quarter and lower in the first and second quarters. See “—Seasonality” for more information.

### OUTLOOK

- Commitment volumes for our North American highway deicing bid season have declined from our prior bid season. We expect Salt sales volumes to range from 10.0 million to 10.5 million tons in 2019.
- Salt EBITDA is expected to be approximately \$65 million to \$80 million in the first half of 2019.
- Plant Nutrition North America sales volumes are expected to range from 350,000 to 400,000 tons in 2019.
- Plant Nutrition North America EBITDA is expected to range from \$30 million to \$40 million in the first half of 2019.
- We expect 2019 Plant Nutrition South America sales volumes to range from 800,000 to 900,000 tons.
- Plant Nutrition South America EBITDA is expected to range from \$10 million to \$20 million in the first half of 2019.

### Investments, Liquidity and Capital Resources

#### Overview

Over the last several years, we have made significant investments in order to strengthen our operational capabilities.

- We shifted all of our Goderich mine production to continuous mining in the fourth quarter of 2017 following significant investments in this technology. Our continuous mining and haulage system at the Goderich mine is expected to provide a safer, more sustainable production environment and enhance our ability to ramp up and down to meet demand fluctuations. In addition, we are near completion of our shaft relining project at our Goderich mine, which we undertook to help secure the integrity of our Goderich mine and our hoisting capacity for the future.

- We have invested in our Utah facility to strengthen our solar-pond-based SOP production through upgrades to our processing plant and our solar evaporation ponds. This included modifying our existing solar evaporation ponds to increase the annual solar harvest and increasing the extraction yield and processing capacity of our SOP plant. We recently completed a project to further expand our SOP production capacity and expand our ability to compact product into various product grades at our Utah facility, which increased our SOP production capacity to approximately 550,000 tons when supplemental KCl feedstock is used.
- In October 2016, we acquired the remaining 65% of the issued and outstanding capital stock of Produquímica (see Note 4 to our Consolidated Financial Statements for more information).

As a holding company, CMI's investments in its operating subsidiaries constitute substantially all of its assets. Consequently, our subsidiaries conduct all of our consolidated operations and own substantially all of our operating assets. The principal source of cash needed to pay our obligations is the cash generated from our subsidiaries' operations and their borrowings. Our subsidiaries are not obligated to make funds available to CMI. Furthermore, we must remain in compliance with the terms of the credit agreement governing our credit facilities, including the total leverage ratio and interest coverage ratio, in order to pay dividends to our stockholders. We must also comply with the terms of our indenture governing our 4.875% Senior Notes due July 2024 (the "4.875% Notes"), which limits the amount of dividends we can pay to our stockholders. We are in compliance with our debt covenants as of December 31, 2018. See Note 10 to our Consolidated Financial Statements for a discussion of our outstanding debt.

Historically, our cash flows from operating activities have generally been adequate to fund our basic operating requirements, ongoing debt service and sustaining investment in our property, plant and equipment. We have also used cash generated from operations to fund capital expenditures which strengthen our operational position, to pay dividends, to fund smaller acquisitions and to repay our debt. We have been able to manage our cash flows generated and used across Compass Minerals to permanently reinvest earnings in our foreign jurisdictions or efficiently repatriate those funds to the U.S. As of December 31, 2018, we had \$18.7 million of cash and cash equivalents (in our Consolidated Balance Sheets) that was either held directly or indirectly by foreign subsidiaries. Due in large part to the seasonality of our deicing salt business, we have experienced large changes in our working capital requirements from quarter to quarter. Historically, our working capital requirements have been the highest in the fourth quarter and lowest in the second quarter. With the addition of our Plant Nutrition South America segment, we expect a less seasonal distribution of working capital requirements. When needed, we fund short-term working capital requirements by accessing our \$300 million revolving credit facility.

We have historically considered the undistributed earnings of our foreign subsidiaries to be permanently reinvested. In December 2017, however, U.S. tax reform legislation was enacted, which included a one-time mandatory tax on previously deferred foreign earnings. As a result, we have revised our permanently reinvested assertion and now expect to repatriate approximately \$150 million of unremitted foreign earnings on which we have recorded \$3.4 million of income tax expense for foreign withholding tax, state income tax net of foreign exchange loss. All of our non-U.S. undistributed earnings through December 31, 2017 were subject to the one-time mandatory tax for which we recorded a net tax expense of \$52.1 million, which is comprised of tax expense of \$55.2 million in 2017 offset by a benefit of \$3.1 million in 2018. Due to our ability to generate adequate levels of U.S. cash flow on an annual basis, it is our current intention to continue to reinvest the remaining undistributed earnings of our foreign subsidiaries indefinitely. We review our tax circumstances on a regular basis with the intent of optimizing cash accessibility and minimizing tax expense. As of December 31, 2018, we have \$173.5 million of non-U.S. undistributed earnings and outside basis differences for which no taxes have been recorded. See Note 8 to our Consolidated Financial Statements for a discussion regarding U.S. tax reform.

In addition, the amount of permanently reinvested foreign earnings is influenced by, among other things, the profits generated by our foreign subsidiaries and the amount of investment in those same subsidiaries. The profits generated by our U.S. and foreign subsidiaries are impacted by the transfer price charged on the transfer of our products between them. As discussed in Note 8 to our Consolidated Financial Statements, our calculated transfer price on certain products between one of our foreign subsidiaries and a domestic subsidiary has been challenged by Canadian federal and provincial governments. In the fourth quarter of 2017, we reached a settlement agreement with federal Canadian and U.S. tax authorities related to our transfer pricing for our 2007-2012 tax years. During 2018, in accordance with the settlement agreement, our U.S. subsidiary made intercompany cash payments of \$85.7 million to our Canadian subsidiary and tax payments to Canadian taxing authorities of \$17.5 million with the remaining \$3.3 million expected to be paid to Canadian taxing authorities during 2019. Corresponding tax refunds of \$1.7 million were received during 2018 from U.S. taxing authorities with the remaining approximately \$21 million of tax refunds expected to be received from U.S. taxing authorities in 2019. Additionally during the fourth quarter of 2018, we reached a settlement agreement on transfer pricing and management fees as part of an advanced pricing agreement with federal Canadian and U.S. tax authorities covering our 2013-2021 tax years. The agreement will result in intercompany cash payments from our U.S. subsidiary to our Canadian subsidiary of \$106.1 million and tax payments to Canadian taxing authorities of \$28.5 million with a corresponding tax refund due from U.S. taxing authorities of \$60.5 million. The timing of the refund is expected to lag the payment to the Canadian tax authorities. Canadian provincial taxing authorities continue to challenge our transfer prices of certain items. The final resolution of these challenges may not occur for several years. We currently expect the outcome of these matters will not have a material impact on our results of operations. However, it is possible the resolution could materially impact the amount of earnings attributable

to our foreign subsidiaries, which could impact the amount of permanently reinvested foreign earnings. See Note 8 to our Consolidated Financial Statements for a discussion regarding our Canadian tax reassessments and settlements.

Principally due to the nature of our deicing business, our cash flows from operations have historically been seasonal, with the majority of our cash flows from operations generated during the first half of the calendar year (see “—Seasonality” section below for more information). When we have not been able to meet our short-term liquidity or capital needs with cash from operations, whether as a result of the seasonality of our business or other causes, we have met those needs with borrowings under our revolving credit facility. We expect to meet the ongoing requirements for debt service, any declared dividends and capital expenditures from these sources. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control.

The table below provides a summary our cash flows by category and year.

<u>2018</u>	<u>2017</u>	<u>2016</u>
<b><i>Operating Activities:</i></b>		
Net cash flows provided by operating activities were \$190.7 million. » Net earnings were \$68.8 million. » Non-cash depreciation and amortization expense was \$136.9 million. » Working capital items were a use of operating cash flows of \$19.9 million.	Net cash flows provided by operating activities were \$146.9 million. » Net earnings were \$42.7 million. » Non-cash depreciation and amortization expense was \$122.2 million. » Working capital items were a use of operating cash flows of \$6.9 million.	Net cash flows provided by operating activities were \$167.3 million. » Net earnings were \$162.7 million which included a non-cash remeasurement gain of \$59.3 million related to the acquisition of Produquímica. » Non-cash depreciation and amortization expense was \$90.3 million. » Working capital items were a use of operating cash flows of \$31.7 million.
<b><i>Investing Activities:</i></b>		
Net cash flows used by investing activities were \$99.6 million. » Included \$96.8 million of capital expenditures.	Net cash flows used by investing activities were \$119.0 million. » Included \$114.1 million of capital expenditures.	Net cash flows used by investing activities were \$467.8 million. » Included \$182.2 million of capital expenditures and cash payments of \$4.7 million relating to our previously held equity investment and \$277.7 million for the full acquisition of Produquímica.
<b><i>Financing Activities:</i></b>		
Net cash flows used by financing activities were \$85.9 million. » Included net proceeds from issuance of debt of \$14.5 million, payments of dividends of \$97.7 million and payments of \$1.7 million related to deferred financing costs.	Net cash flows used by financing activities were \$73.4 million. » Included net proceeds from issuance of debt of \$38.7 million, payments of dividends of \$97.5 million and payments of \$14.7 million related to contingent consideration from the Produquímica acquisition.	Net cash flows provided by financing activities were \$314.6 million. » Included net proceeds from issuance of debt of \$416.7 million, payments of dividends of \$94.1 million and payments of \$8.5 million related to the refinancing of debt.

### ***Capital Resources***

We believe our primary sources of liquidity will continue to be cash flow from operations and borrowings under our revolving credit facility. We believe that our current banking syndicate is secure and believe we will have access to our entire revolving credit facility. We expect that ongoing requirements for debt service and committed or sustaining capital expenditures will primarily be funded from these sources.

Our debt service obligations could, under certain circumstances, materially affect our financial condition and prevent us from fulfilling our debt obligations. See “Risk Factors – Our indebtedness and ability to pay our indebtedness could adversely affect our business and financial condition.” Furthermore, CMI is a holding company with no operations of its own and is dependent on its subsidiaries for cash flow. As discussed in Note 10 to our Consolidated Financial Statements, at December 31, 2018, we had \$1.37 billion of outstanding indebtedness consisting of \$250.0 million under our 4.875% Notes, \$1.03 billion of borrowings outstanding under our senior secured credit facilities (consisting of term loans and a revolving credit facility), including \$197.0 million borrowed against our revolving credit facility, and \$95.5 million of debt related to our Produquímica business in Brazil. Letters of credit totaling \$10.6 million as of December 31, 2018 reduced available borrowing capacity under the revolving credit facility to \$92.4 million. In the future, including in 2019, we may borrow amounts under the revolving credit facility or enter into additional financing to fund our working capital requirements, potential acquisitions and capital expenditures and for other general corporate purposes.

Our ability to make scheduled interest and principal payments on our indebtedness, to refinance our indebtedness, to fund planned capital expenditures and to fund acquisitions will depend on our ability to generate cash in the future. This, to a certain extent, is subject to general economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. Based on our current level of operations, we believe that cash flow from operations and available cash, together with available borrowings under our revolving credit facility, will be adequate to meet our liquidity needs over the next 12 months.

We have various foreign and state net operating loss (“NOL”) carryforwards that may be used to offset a portion of future taxable income to reduce our cash income taxes that would otherwise be payable. However, we may not be able to use any or all of our NOL carryforwards to offset future taxable income and our NOL carryforwards may become subject to additional limitations due to future ownership changes or otherwise. At December 31, 2018, we had \$28.4 million of gross NOL carryforwards (\$27.2 million of gross foreign federal NOL carryforwards that have no expiration date and \$1.2 million of gross foreign federal NOL carryforwards that expire in 2033) and \$0.2 million of net operating tax-effected state NOL carryforwards that expire beginning in 2027.

We have a defined benefit pension plan for certain of our current and former U.K. employees. Beginning December 1, 2008, future benefits ceased to accrue for the remaining active employee participants in the plan concurrent with the establishment of a defined contribution plan for these employees. Generally, our cash funding policy is to make the minimum annual contributions required by applicable regulations. Although the fair value of the plan’s assets are in excess of the accumulated benefit obligations, we expect to be required to use cash from operations above our historical levels to fund the plan in the future.

### ***Off-Balance Sheet Arrangements***

At December 31, 2018, we had no off-balance sheet arrangements that have or are likely to have a material current or future effect on our consolidated financial statements.

### ***Contractual Obligations***

Our contractual cash obligations and commitments as of December 31, 2018, are as follows (in millions):

#### **Payments Due by Period**

<b>Contractual Cash Obligations</b>	<b>Total</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Thereafter</b>
Long-term Debt	\$1,371.4	\$ 43.7	\$ 63.3	\$1,010.8	\$ 1.9	\$ 1.7	\$ 250.0
Interest <sup>(a)</sup>	195.1	66.5	63.2	34.4	12.2	12.2	6.6
Capital Lease Obligations <sup>(b)</sup>	12.2	2.3	1.8	1.3	1.1	1.1	4.6
Operating Leases <sup>(b)</sup>	55.0	16.4	10.6	5.7	4.4	3.6	14.3
Unconditional Purchase Obligations <sup>(c)</sup>	47.8	26.2	8.6	6.7	6.2	0.1	—
One-time transition tax obligation	36.0	2.5	3.2	3.2	3.2	6.0	17.9
Estimated Future Pension Benefit Obligations <sup>(d)</sup>	58.6	2.8	2.9	3.0	3.1	3.2	43.6
<b>Total Contractual Cash Obligations</b>	<b>\$1,776.1</b>	<b>\$ 160.4</b>	<b>\$ 153.6</b>	<b>\$1,065.1</b>	<b>\$ 32.1</b>	<b>\$ 27.9</b>	<b>\$ 337.0</b>

<b>Other Commitments</b>	<b>Total</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>Thereafter</b>
Letters of Credit	\$ 10.6	\$ 10.6	\$ —	\$ —	\$ —	\$ —	\$ —
Bank Letter Guarantees <sup>(e)</sup>	8.5	8.5	—	—	—	—	—
Performance Bonds <sup>(e)</sup>	181.4	181.4	—	—	—	—	—
<b>Total Other Commitments</b>	<b>\$ 200.5</b>	<b>\$ 200.5</b>	<b>\$ —</b>				

(a) Based on maintaining existing debt balances to maturity. Interest on our credit facilities varies with the Eurodollar rate and the base rate. The December 31, 2018 blended rate of 4.4%, including the applicable spread, was used for this calculation for CMI debt. The amounts in the table do not include interest payments of approximately \$4 million each year which may be required to be deposited with the taxing authorities if other collateral arrangements cannot be made as long as disputes with Canadian taxing authorities remain outstanding. Note 8 to our Consolidated Financial Statements provides additional information related to our Canadian tax reassessments.

(b) We lease property and equipment under non-cancelable operating and capital leases for varying periods.

(c) We have contracts to purchase certain amounts of electricity, equipment and raw materials. In addition, we have minimum throughput commitments in certain depots and warehouses.

(d) Note 9 to our Consolidated Financial Statements provides additional information.

(e) Note 12 to our Consolidated Financial Statements provides additional information.

### Sensitivity Analysis Related to EBITDA and Adjusted EBITDA

Management uses a variety of measures to evaluate our performance. While our consolidated financial statements, taken as a whole, provide an understanding of our overall results of operations, financial condition and cash flows, we analyze components of the consolidated financial statements to identify certain trends and evaluate specific performance areas. In addition to using U.S. generally accepted accounting principles (“GAAP”) financial measures, such as gross profit, net earnings and cash flows generated by operating activities, management uses EBITDA and Adjusted EBITDA. Both EBITDA and Adjusted EBITDA are non-GAAP financial measures used to evaluate the operating performance of our core business operations because our resource allocation, financing methods and cost of capital, and income tax positions are managed at a corporate level, apart from the activities of the operating segments, and the operating facilities are located in different taxing jurisdictions, which can cause considerable variation in net earnings. We also use EBITDA and Adjusted EBITDA to assess our operating performance and return on capital against other companies, and to evaluate potential acquisitions or other capital projects. EBITDA and Adjusted EBITDA are not calculated under U.S. GAAP and should not be considered in isolation or as a substitute for net earnings, cash flows or other financial data prepared in accordance with U.S. GAAP or as a measure of our overall profitability or liquidity. EBITDA and Adjusted EBITDA exclude interest expense, income taxes and depreciation and amortization, each of which are an essential element of our cost structure and cannot be eliminated. Furthermore, Adjusted EBITDA excludes other cash and non-cash items, including restructuring costs, refinancing costs and other (income) expense. Our borrowings are a significant component of our capital structure and interest expense is a continuing cost of debt. We are also required to pay income taxes, a required and ongoing consequence of our operations. We have a significant investment in capital assets and depreciation and amortization reflect the utilization of those assets in order to generate revenues. Consequently, any measure that excludes these elements has material limitations. While EBITDA and Adjusted EBITDA are frequently used as measures of operating performance, these terms are not necessarily comparable to similarly titled measures of other companies due to the potential inconsistencies in the method of calculation.

The calculation of EBITDA and Adjusted EBITDA as used by management is set forth in the table below (in millions).

	For the Year Ended December 31,		
	2018	2017	2016
Net earnings	\$ 68.8	\$ 42.7	\$ 162.7
Interest expense	62.5	52.9	34.1
Income tax expense	8.8	60.0	34.6
Depreciation, depletion and amortization	136.9	122.2	90.3
EBITDA	\$ 277.0	\$ 277.8	\$ 321.7
Adjustments to EBITDA:			
Restructuring charges	\$ —	\$ 4.3	\$ —
CEO transition costs	5.1	—	—
Gain from remeasurement of equity method investment	—	—	(59.3)
Business acquisition related items	—	—	8.4
Indefinite-lived intangible asset impairment	—	—	3.1
Fees and premiums paid to redeem debt	—	—	3.0
Other (income) expense, net	(8.8)	4.4	(1.9)
Adjusted EBITDA	\$ 273.3	\$ 286.5	\$ 275.0

In 2018, we incurred \$5.1 million of CEO transition costs. In 2017, we incurred charges of \$4.3 million related to ongoing restructuring activities. Key adjustments in 2016 included a partial write-down of a trade name acquired in our Wolf Trax acquisition, a gain of \$59.3 million related to the remeasurement of our previously held equity investment in Produquímica (see Note 4 to our Consolidated Financial Statements) and \$8.4 million of costs in connection with the acquisition of Produquímica, primarily related to the step-up of finished goods inventory to fair value, which was recorded in product cost as the inventory was sold. Adjusted EBITDA also includes other non-operating income, primarily foreign exchange gains (losses) resulting from the translation of intercompany obligations, interest income and investment income (loss) relating to our nonqualified retirement plan.

Our net earnings, EBITDA and Adjusted EBITDA are impacted by other events or transactions that we believe to be important in understanding our earnings trends such as the variability of weather. The impact of weather has not been adjusted in the amounts presented above. Our 2017 and 2016 results were unfavorably impacted by mild winter weather in the markets we serve.

## Management's Discussion of Critical Accounting Policies and Estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the reporting date and the reported amounts of revenue and expenses during the reporting period. Actual results could vary from these estimates. We have identified the critical accounting policies and estimates that are most important to the portrayal of our financial condition and results of operations. The policies set forth below require significant subjective or complex judgments by management, often as a result of the need to make estimates about the effect of matters that are inherently uncertain.

**Mineral Interests** – As of December 31, 2018, we maintained \$123.3 million of net mineral properties as a part of property, plant and equipment. Mineral interests include probable mineral reserves. We lease mineral reserves at several of our extraction facilities. These leases have varying terms, and many provide for a royalty payment to the lessor based on a specific amount per ton of mineral extracted or as a percentage of revenue.

Mineral interests are primarily depleted on a units-of-production method based on third-party estimates of recoverable reserves. Our rights to extract minerals are generally contractually limited by time or lease boundaries. If we are not able to continue to extend lease agreements, as we have in the past, at commercially reasonable terms, without incurring substantial costs or incurring material modifications to the existing lease terms and conditions, if the assigned lives realized are less than those projected by management, or if the actual size, quality or recoverability of the minerals is less than the estimated probable reserves, then the rate of amortization could be increased or the value of the reserves could be reduced by a material amount.

**Income Taxes** – Developing our provision for income taxes and analyzing our potential tax exposure items requires significant judgment and assumptions as well as a thorough knowledge of the tax laws in various jurisdictions. These estimates and judgments occur in the calculation of certain tax liabilities and in the assessment of the likelihood that we will be able to realize our deferred tax assets, which arise from temporary differences between the tax and financial statement recognition of revenue and expense, carryforwards and other items. Based on all available evidence, both positive and negative, the reliability of that evidence and the extent such evidence can be objectively verified, we determine whether it is more likely than not that all, or a portion of, the deferred tax assets will be realized.

In evaluating our ability to realize our deferred tax assets, we consider the sources and timing of taxable income, our ability to carry back tax attributes to prior periods, qualifying tax planning and estimates of future taxable income exclusive of reversing temporary differences. In determining future taxable income, our assumptions include the amount of pre-tax operating income according to multiple federal, international and state taxing jurisdictions, the origination of future temporary differences and the implementation of feasible and prudent tax planning. These assumptions require significant judgment about material estimates, assumptions and uncertainties in connection with the forecasts of future taxable income, the merits in tax law and assessments regarding previous taxing authorities' proceedings or written rulings. While these assumptions are consistent with the plans and estimates we use to manage the underlying businesses, differences in our actual operating results or changes in our tax planning, tax credits, tax laws or our assessment of the tax merits of our positions could affect our future assessments.

In addition, the calculation of our tax liabilities involves uncertainties in the application of complex tax regulations in multiple jurisdictions. We recognize potential liabilities in accordance with applicable U.S. GAAP for anticipated tax issues in the U.S. and other tax jurisdictions based on our estimate of whether, and the extent to which, additional taxes will be due. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when we determine the liabilities are no longer necessary. If our estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result. See Note 8 to our Consolidated Financial Statements for further discussion of our income taxes.

We have elected to account for Global Intangible Low-Taxed Income ("GILTI") in the year the tax is incurred, rather than recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years.

**Taxes on Foreign Earnings** – Our 2018 and 2017 effective tax rates include a tax benefit of \$3.1 million and tax expense of \$55.2 million, respectively, related to the one-time mandatory tax on non-U.S. undistributed earnings deemed repatriated under U.S. tax reform. During the fourth quarter of 2018, we changed our permanently reinvested assertion and now expect to repatriate \$150 million of unremitted foreign earnings, which is subjected to the one-time mandatory tax under U.S. tax reform. Income tax expense of \$3.4 million has been recorded in 2018 for foreign withholding tax, state income tax net of foreign exchange loss. We consider all remaining non-U.S. earnings to be permanently reinvested outside the U.S. to the extent these earnings are not subject to U.S. income tax under an anti-deferral tax regime. As of December 31, 2018, we have approximately \$173.5 million of non-U.S. undistributed earnings and outside basis differences.

**U.K. Pension Plan** – We have a defined benefit pension plan covering some of our current and former employees in the U.K. The U.K. pension plan was closed to new participants in 1992. As we elected to freeze our pension plan, we ceased to accrue future benefits under the plan beginning December 1, 2008. We select the actuarial assumptions for our pension plan after consultation with our actuaries and consideration of market conditions. These assumptions include the discount rate and the expected long-term rates of return on plan assets, which are used in the calculation of the actuarial valuation of our defined benefit pension plans.

If actual conditions or results vary from those projected by management, adjustments may be required in future periods to meet minimum pension funding or to increase pension expense or our pension liability. An adverse change of 25 basis points in our discount rate would have increased our projected benefit obligation as of December 31, 2018, by approximately \$2.1 million and would decrease our net periodic pension benefit for 2018 by approximately \$0.1 million. An adverse change of 25 basis points in our expected return on assets assumption as of December 31, 2018, would decrease our net periodic benefit for 2018 by approximately \$0.1 million.

We set our discount rate for our U.K. pension plan based on a forward yield curve for a portfolio of high credit quality bonds with expected cash flows and an average duration closely matching the expected benefit payments under the plan. The assumption for the return on plan assets is determined based on expected returns applicable to each type of investment within the portfolio expected to be maintained over the next 15 to 20 years. Our funding policy has been to make the minimum annual contributions required by applicable regulations. However, we have made special payments during some years when changes in the business could reasonably impact the pension plan's available assets and when special early retirement payments or other inducements are made to pensioners. Contributions totaled \$0.7 million, \$0.8 million and \$1.4 million during the years ended December 31, 2018, 2017 and 2016, respectively. If supplemental benefits were approved and granted under the provisions of the plan, or if periodic statutory valuations cause a change in funding requirements, our contributions could increase to fund all or a portion of those benefits. See Note 9 to the Consolidated Financial Statements for additional discussion of our pension plan.

**Other Significant Accounting Policies** – Other significant accounting policies not involving the same level of measurement uncertainties as those discussed above are nevertheless important to an understanding of our consolidated financial statements. Policies related to revenue recognition, allowance for doubtful accounts, valuation of inventory reserves, valuation of equity compensation instruments, derivative instruments and environmental accruals require judgments on complex matters.

### **Effects of Currency Fluctuations and Inflation**

Our operations outside of the U.S. are conducted primarily in Canada, Brazil and the U.K. Therefore, our results of operations are subject to both currency transaction risk and currency translation risk. We incur currency transaction risk whenever we or one of our subsidiaries enter into either a purchase or sales transaction using a currency other than the local currency of the transacting entity. With respect to currency translation risk, our financial condition and results of operations are measured and recorded in the relevant local currency and then translated into U.S. dollars for inclusion in our historical consolidated financial statements. Exchange rates between these currencies and the U.S. dollar have fluctuated significantly from time to time and may do so in the future. The majority of revenues and costs are denominated in U.S. dollars, with Canadian dollars, Brazilian reais and British pounds sterling also being significant. We generated 49% of our 2018 sales in foreign currencies, and we incurred 50% of our 2018 total operating expenses in foreign currencies. Additionally, we have approximately \$1.02 billion of net assets denominated in foreign currencies. In 2016, the average rate for the U.S. dollar strengthened against the British pound sterling and, since the October 2016 Produquímica acquisition date, against the Brazilian real. The average rate for the U.S. dollar weakened against the Canadian dollar in 2016. In 2017, the average rate for the U.S. dollar strengthened against the Brazilian real and weakened against the British pound and the Canadian dollar. In 2018, the average rate for the U.S. dollar strengthened against the Brazilian real, the Canadian dollar and the British pound sterling. Significant changes in the value of the Canadian dollar, Brazilian real or the British pound sterling relative to the U.S. dollar could have a material adverse effect on our financial condition and our ability to meet interest and principal payments on U.S. dollar-denominated debt, including borrowings under our senior secured credit facilities.

Although inflation has not had a significant impact on our operations, our efforts to recover cost increases due to inflation may be hampered as a result of the competitive industries and countries in which we operate.

### **Seasonality**

We experience a substantial amount of seasonality in our sales, including our salt deicing product sales. Consequently, our Salt sales and operating income are generally higher in the first and fourth quarters and lower during the second and third quarters of each year. In particular, sales of highway and consumer deicing salt and magnesium chloride products vary based on the severity of the winter conditions in areas where the product is used. Following industry practice in North America, we seek to stockpile sufficient quantities of deicing salt in the second, third and fourth quarters to meet the estimated requirements for the winter season.

Our plant nutrition business is also seasonal. The strongest demand for our Plant Nutrition South America products in Brazil typically occurs during the spring planting season. As a result, we and our customers generally build inventories during the low demand periods of the year to ensure timely product availability during the peak sales season. The seasonality of this demand results in our sales volumes and net sales for our Plant Nutrition South America segment usually being the highest during the third and fourth quarters of each year (as the spring planting season begins in September in Brazil).

### **Recent Accounting Pronouncements**

See Note 2 to our Consolidated Financial Statements for a discussion of recent accounting pronouncements.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Our business is subject to various types of market risks that include, but are not limited to, interest rate risk, foreign currency risk and commodity pricing risk. Management may take actions to mitigate our exposure to these types of risks including entering into forward purchase contracts and other financial instruments. However, there can be no assurance that our hedging activities will eliminate or substantially reduce these risks. We do not enter into any financial instrument arrangements for speculative purposes.

**Interest Rate Risk**

As of December 31, 2018, we had \$1.03 billion of debt outstanding under our credit agreement (consisting of term loans and revolving credit facility) and \$95.5 million of debt related to our Produquímica business in Brazil, bearing interest at variable rates. Accordingly, our earnings and cash flows will be affected by changes in interest rates to the extent the principal balance is unhedged. Assuming no change in the amount of debt outstanding, a 100 basis point increase in the average interest rate under these borrowings would have increased the interest expense related to our variable rate debt by approximately \$11.2 million based upon our debt outstanding as of December 31, 2018. Actual results may vary due to changes in the amount of variable rate debt outstanding.

As of December 31, 2018, a significant portion of the investments in the U.K. pension plan are in bond funds. Changes in interest rates could impact the value of the investments in the pension plan.

**Foreign Currency Risk**

In addition to the U.S., we primarily conduct our business in Canada, Brazil and the U.K. Our operations are, therefore, subject to volatility because of currency fluctuations, inflation changes and changes in political and economic conditions in these countries. Sales and expenses are frequently denominated in local currencies, and our results of operations may be affected adversely as currency fluctuations affect our product prices and operating costs or those of our competitors. We may engage in hedging operations, including forward foreign currency exchange contracts, to reduce the exposure of our cash flows to fluctuations in foreign currency exchange rates. We do not engage in hedging for speculative investment purposes. Any hedging operations may not eliminate or substantially reduce risks associated with fluctuating currencies. See “Risk Factors—Risks associated with our international operations and sales could adversely affect our business and earnings.”

Considering our foreign earnings, a hypothetical 10% unfavorable change in exchange rates compared to the U.S. dollar would have an estimated \$1.9 million impact on our operating earnings for the year ended December 31, 2018. Actual changes in market prices or rates will differ from hypothetical changes.

Our Produquímica business in Brazil has U.S. dollar denominated debt. We have entered into foreign currency swap agreements whereby Produquímica has agreed to swap interest and principal payments on the loans denominated in U.S. dollars for principal and interest payments denominated in Brazilian reais, Produquímica’s functional currency. The objective of the swap agreements is to mitigate the foreign currency fluctuation risk related to holding debt denominated in a currency other than Produquímica’s functional currency. We may either continue to hedge this exposure or borrow in Brazilian reais to meet the capital needs of our Brazilian operations.

**Commodity Pricing Risk**

We have a hedging policy to mitigate the impact of fluctuations in the price of natural gas. The notional amounts of volumes hedged are determined based on a combination of factors, including estimated natural gas usage, current market prices and historical market prices. We enter into contractual natural gas price arrangements, which effectively fix the purchase price of our natural gas requirements up to 36 months in advance of the physical purchase of the natural gas. We may hedge up to approximately 90% of our expected natural gas usage. Because of the varying locations of our production facilities, we also enter into basis swap agreements to eliminate any further price variation due to local market differences. We have determined that these financial instruments qualify as cash flow hedges under U.S. GAAP. As of December 31, 2018, the amount of natural gas hedged with derivative contracts totaled 1.0 million MMBtus, all of which expire within one year.

Excluding natural gas hedged with derivative instruments, a hypothetical 10% adverse change in our natural gas prices during the year ended December 31, 2018 would have increased our cost of sales by approximately \$0.6 million. Actual results will vary due to actual changes in market prices and consumption.

We are subject to increases and decreases in the cost of transporting our products due to variations in our contracted carriers’ cost of fuel, which is typically diesel fuel. We may engage in hedging operations, including forward contracts, to reduce our exposure to changes in our transportation cost due to changes in the cost of fuel in the future. Due to the difficulty in meeting all of the requirements for hedge accounting under current U.S. GAAP, any such cash flow hedges of transportation costs would likely be accounted for by marking the hedges to market at each reporting period. Our historical results do not reflect any direct fuel hedging activity. However, hedging operations may not eliminate or substantially reduce the risks associated with changes in our transportation costs. We do not engage in hedging for speculative investment purposes.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

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## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Compass Minerals International, Inc.

### Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Compass Minerals International, Inc. (the Company) as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (2) (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 28, 2019 expressed an unqualified opinion thereon.

### Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the 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. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the 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 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 financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2005.

Kansas City, Missouri

February 28, 2019

## Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Compass Minerals International, Inc.

### Opinion on Internal Control over Financial Reporting

We have audited Compass Minerals International, Inc.'s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Compass Minerals International, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive (loss) income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and the financial statement schedule listed in the Index at Item 15(a) (2) and our report dated February 28, 2019 expressed an unqualified opinion thereon.

### Basis for Opinion

The Company's management is responsible 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 Controls Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

### 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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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/ Ernst & Young LLP

Kansas City, Missouri  
February 28, 2019

**Consolidated Balance Sheets**

<b>(In millions, except share data)</b>	<b>December 31,</b>	
	<b>2018</b>	<b>2017</b>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 27.0	\$ 36.6
Receivables, less allowance for doubtful accounts of \$9.9 in 2018 and \$10.9 in 2017	311.6	344.5
Inventories	266.6	289.9
Other	116.0	66.5
<b>Total current assets</b>	<b>721.2</b>	<b>737.5</b>
Property, plant and equipment, net	1,052.0	1,138.1
Intangible assets, net	115.9	143.6
Goodwill	350.8	405.0
Investment in equity method investee	24.5	24.6
Other	103.5	122.2
<b>Total assets</b>	<b>\$ 2,367.9</b>	<b>\$ 2,571.0</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Current portion of long-term debt	\$ 43.5	\$ 32.1
Accounts payable	111.3	123.5
Accrued expenses	54.9	54.4
Accrued salaries and wages	31.8	23.9
Income taxes payable	32.1	25.9
Accrued interest	9.7	8.2
<b>Total current liabilities</b>	<b>283.3</b>	<b>268.0</b>
Long-term debt, net of current portion	1,321.2	1,330.4
Deferred income taxes, net	100.8	127.0
Other noncurrent liabilities	122.4	151.0
Commitments and contingencies (Note 12)		
Stockholders' equity:		
Common stock:		
\$0.01 par value, 200,000,000 authorized shares; 35,367,264 issued shares	0.4	0.4
Additional paid-in capital	110.1	102.5
Treasury stock, at cost — 1,513,808 shares at December 31, 2018 and 1,539,763 shares at December 31, 2017	(2.9)	(2.9)
Retained earnings	643.5	672.5
Accumulated other comprehensive loss	(210.9)	(77.9)
<b>Total stockholders' equity</b>	<b>540.2</b>	<b>694.6</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 2,367.9</b>	<b>\$ 2,571.0</b>

The accompanying notes are an integral part of the consolidated financial statements.

**Consolidated Statements of Operations**

(In millions, except share data)	For the Year Ended December 31,		
	2018	2017	2016
Sales	\$ 1,493.6	\$ 1,364.4	\$ 1,138.0
Shipping and handling cost	320.0	267.5	244.9
Product cost	879.7	770.3	593.6
Gross profit	293.9	326.6	299.5
Selling, general and administrative expenses	163.6	167.4	124.9
Operating earnings	130.3	159.2	174.6
Other expense (income):			
Interest expense	62.5	52.9	34.1
Net (earnings) loss in equity investee	(1.0)	(0.8)	1.4
Gain from remeasurement of equity method investment	—	—	(59.3)
Other, net	(8.8)	4.4	1.1
Earnings before income taxes	77.6	102.7	197.3
Income tax expense	8.8	60.0	34.6
Net earnings	\$ 68.8	\$ 42.7	\$ 162.7
Basic net earnings per common share	\$ 2.02	\$ 1.25	\$ 4.79
Diluted net earnings per common share	\$ 2.02	\$ 1.25	\$ 4.79
Weighted-average common shares outstanding (in thousands):			
Basic	33,848	33,819	33,776
Diluted	33,848	33,820	33,780
Cash dividends per share	\$ 2.88	\$ 2.88	\$ 2.78

The accompanying notes are an integral part of the consolidated financial statements.

**Consolidated Statements of Comprehensive (Loss) Income**

<b>(In millions)</b>	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
Net earnings	\$ 68.8	\$ 42.7	\$ 162.7
Other comprehensive income (loss):			
Unrealized (loss) gain from change in pension costs, net of tax of \$0.1, \$0.0 and \$(0.1) in 2018, 2017 and 2016	(0.6)	(0.2)	0.1
Unrealized gain (loss) on cash flow hedges, net of tax of \$(0.2), \$0.8 and \$(1.3) in 2018, 2017 and 2016	0.4	(1.5)	2.2
Cumulative translation adjustment	(132.6)	28.7	1.1
<b>Comprehensive (loss) income</b>	<b>\$ (64.0)</b>	<b>\$ 69.7</b>	<b>\$ 166.1</b>

The accompanying notes are an integral part of the consolidated financial statements.

**Consolidated Statements of Stockholders' Equity**

<b>(In millions)</b>	<b>Common Stock</b>	<b>Additional Paid-In Capital</b>	<b>Treasury Stock</b>	<b>Retained Earnings</b>	<b>Accumulated Other Comprehensive Loss</b>	<b>Total</b>
Balance, December 31, 2015	\$ 0.4	\$ 91.7	\$ (3.2)	\$ 659.1	\$ (108.3)	\$ 639.7
Comprehensive income				162.7	3.4	166.1
Dividends on common stock/equity awards		0.2		(94.3)		(94.1)
Shares issued for stock units		(0.2)	0.2			—
Income tax deficiencies from equity awards		(0.2)				(0.2)
Stock options exercised		0.7				0.7
Stock-based compensation		4.9				4.9
Balance, December 31, 2016	\$ 0.4	\$ 97.1	\$ (3.0)	\$ 727.5	\$ (104.9)	\$ 717.1
Comprehensive income				42.7	27.0	69.7
Dividends on common stock/equity awards		0.2		(97.7)		(97.5)
Shares issued for stock units		(0.1)	0.1			—
Stock options exercised		0.3				0.3
Stock-based compensation		5.0				5.0
Balance, December 31, 2017	\$ 0.4	\$ 102.5	\$ (2.9)	\$ 672.5	\$ (77.9)	\$ 694.6
Comprehensive income (loss)				68.8	(132.8)	(64.0)
Stranded tax effect from tax reform				0.2	(0.2)	—
Dividends on common stock/equity awards		0.3		(98.0)		(97.7)
Stock-based compensation		7.3				7.3
Balance, December 31, 2018	\$ 0.4	\$ 110.1	\$ (2.9)	\$ 643.5	\$ (210.9)	\$ 540.2

The accompanying notes are an integral part of the consolidated financial statements.

**Consolidated Statements of Cash Flows**

<b>(In millions)</b>	<b>For the Year Ended December 31,</b>		
	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Cash flows from operating activities:</b>			
Net earnings	\$ 68.8	\$ 42.7	\$ 162.7
Adjustments to reconcile net earnings to net cash flows provided by operating			
Depreciation, depletion and amortization	136.9	122.2	90.3
Finance fee amortization	2.2	2.2	2.0
Early extinguishment and refinancing of long-term debt	—	—	0.7
Impairment of intangible asset	—	—	3.1
Stock-based compensation	7.8	5.0	4.9
Deferred income taxes	(16.7)	(16.5)	(11.3)
Net (earnings) loss in equity investee	(1.0)	(0.8)	1.4
Gain on settlement of acquisition-related contingent consideration	—	(1.9)	—
Gain from remeasurement of equity method investment	—	—	(59.3)
Unrealized foreign exchange loss	8.5	0.3	—
Other, net	4.1	0.6	4.5
Changes in operating assets and liabilities, net of acquisition:			
Receivables	16.4	(22.7)	(76.9)
Inventories	(16.8)	(5.9)	65.1
Other assets	(18.4)	(72.8)	35.4
Accounts payable, income taxes payable and accrued expenses	21.1	(3.6)	(56.0)
Other liabilities	(22.2)	98.1	0.7
<b>Net cash provided by operating activities</b>	<b>190.7</b>	<b>146.9</b>	<b>167.3</b>
<b>Cash flows from investing activities:</b>			
Capital expenditures	(96.8)	(114.1)	(182.2)
Investment in equity method investee	—	—	(4.7)
Acquisition of a business, net of cash and cash equivalents acquired	—	—	(277.7)
Other, net	(2.8)	(4.9)	(3.2)
<b>Net cash used in investing activities</b>	<b>(99.6)</b>	<b>(119.0)</b>	<b>(467.8)</b>
<b>Cash flows from financing activities:</b>			
Proceeds from revolving credit facility borrowings	457.4	295.8	384.3
Principal payments on revolving credit facility borrowings	(429.1)	(232.0)	(283.4)
Proceeds from the issuance of long-term debt	54.3	98.7	850.9
Principal payments on long-term debt	(68.1)	(123.8)	(535.1)
Dividends paid	(97.7)	(97.5)	(94.1)
Acquisition-related contingent consideration payment	—	(14.7)	—
Premium and other payments to refinance debt	—	(0.2)	(2.8)
Deferred financing costs	(1.7)	(0.7)	(5.7)
Proceeds received from stock option exercises	—	0.3	0.7
Excess tax deficiencies from equity compensation awards	—	—	(0.2)
Other	(1.0)	0.7	—
<b>Net cash (used in) provided by financing activities</b>	<b>(85.9)</b>	<b>(73.4)</b>	<b>314.6</b>
<b>Effect of exchange rate changes on cash and cash equivalents</b>	<b>(14.8)</b>	<b>4.7</b>	<b>4.9</b>
<b>Net change in cash and cash equivalents</b>	<b>(9.6)</b>	<b>(40.8)</b>	<b>19.0</b>
<b>Cash and cash equivalents, beginning of the year</b>	<b>36.6</b>	<b>77.4</b>	<b>58.4</b>
<b>Cash and cash equivalents, end of year</b>	<b>\$ 27.0</b>	<b>\$ 36.6</b>	<b>\$ 77.4</b>
<b>Supplemental cash flow information:</b>			
Interest paid, net of amounts capitalized	\$ 52.1	\$ 42.7	\$ 26.7
Income taxes paid, net of refunds	\$ 38.3	\$ 27.2	\$ 59.4

See Note 4 to the Consolidated Financial Statements for detail regarding the non-cash effects of the 2016 business acquisition.

The accompanying notes are an integral part of the consolidated financial statements.

## Notes to Consolidated Financial Statements

### 1. ORGANIZATION AND FORMATION

Compass Minerals International, Inc. (“CMI”), through its subsidiaries (collectively, “CMP,” “Compass Minerals” or the “Company”), is a leading producer of essential minerals that solve nature’s challenges, including salt for winter roadway safety and other consumer, industrial and agricultural uses, and specialty plant nutrition minerals that improve the quality and yield of crops, and specialty chemicals for water treatment and other industrial processes. The Company’s principal products are salt, consisting of sodium chloride and magnesium chloride, sulfate of potash (“SOP”) and various other micronutrient products. The Company’s production sites are located in the United States (“U.S.”), Canada, Brazil and the United Kingdom (the “U.K.”). The Company also provides records management services to businesses located in the U.K.

CMI is a holding company with no operations other than those of its subsidiaries.

### 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### *a. Management Estimates:*

The preparation of financial statements in conformity with U.S. generally accepted accounting principles (“GAAP”) as included in the Accounting Standards Codification requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

#### *b. Basis of Consolidation:*

The Company’s consolidated financial statements include the accounts of CMI and its wholly-owned domestic and foreign subsidiaries. All significant intercompany balances and transactions have been eliminated in consolidation.

#### *c. Foreign Currency:*

Assets and liabilities are translated into U.S. dollars at end of period exchange rates. Revenues and expenses are translated using the monthly average rates of exchange during the year. Adjustments resulting from the translation of foreign-currency financial statements into the reporting currency, U.S. dollars, are included in accumulated other comprehensive loss. The Company recorded foreign exchange (losses) gains of \$(56.5) million, \$5.8 million and \$15.8 million in 2018, 2017 and 2016, respectively, in accumulated other comprehensive loss related to intercompany notes which were deemed to be of long-term investment nature. Aggregate exchange gains (losses) from transactions denominated in a currency other than the functional currency, which are included in other expense (income), for the years ended December 31, 2018, 2017 and 2016, were \$(5.8) million, \$7.1 million and \$0.1 million, respectively.

#### *d. Revenue Recognition:*

In May 2014, the FASB issued new revenue recognition guidance. The guidance provides a single, comprehensive model for recognizing revenue from contracts with customers. The new revenue recognition model supersedes existing guidance and requires revenue recognition to depict the transfer of promised goods or services to customers in an amount that reflects the consideration an entity expects to receive in exchange for those goods or services. The Company adopted the guidance effective January 1, 2018 using the modified retrospective transition method, which requires the cumulative effect of adoption, if any, to be recognized as an adjustment to opening retained earnings in the period of adoption. The Company’s revenue arrangements generally consist of a single performance obligation to transfer promised goods or services. As a result, the Company did not identify any material differences in the amount and timing of revenue recognition for its revenue streams. Accordingly, the Company did not record any transition adjustment upon adoption of the new guidance. Under the new standard, substantially all of the Company’s revenue is recognized at a point in time when control of the goods transfers to the customer.

During comparative periods, the Company typically recognized revenue at the time of shipment to the customer, which coincides with the transfer of title and risk of ownership to the customer. Sales represent billings to customers net of sales taxes charged for the sale of the product. Sales include amounts charged to customers for shipping and handling costs, which are expensed when the related product is sold.

#### *e. Cash and Cash Equivalents:*

The Company considers all investments with original maturities of three months or less to be cash equivalents. The Company maintains the majority of its cash in bank deposit accounts with several commercial banks with high credit ratings in the U.S., Canada, Brazil and Europe. Typically, the Company has bank deposits in excess of federally insured limits. Currently, the Company does not believe it is exposed to significant credit risk on its cash and cash equivalents.

*f. Accounts Receivable and Allowance for Doubtful Accounts:*

Receivables consist almost entirely of trade accounts receivable. Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in its existing accounts receivable. The Company determines the allowance based on historical write-off experience by business line and a current assessment of its portfolio, including information regarding individual customers. The Company reviews its past due account balances for collectability and adjusts its allowance for doubtful accounts accordingly. Account balances are charged off against the allowance when the Company believes it is probable that the receivable will not be recovered.

In the latter half of 2018, the Company sold approximately \$32.7 million of receivables for \$30.4 million in cash. The proceeds of this transaction were used to refinance Brazilian loans (see Note 10). The Company is contingently liable for up to 20% of the receivables balance if the banks are unable to collect on these accounts. The Company does not believe the amount to be ultimately payable for any unpaid receivables to be material to its financial statements. The Company has no further involvement with these accounts.

*g. Inventories:*

Inventories are stated at the lower of cost or net realizable value. Finished goods and raw material and supply costs are valued using the average cost method. Raw materials and supplies primarily consist of raw materials purchased to aid in the production of mineral and chemical products, maintenance materials and packaging materials. Finished goods are primarily comprised of salt, magnesium chloride, and plant nutrition and chemical products readily available for sale. Substantially all costs associated with the production of finished goods at the Company's production locations are captured as inventory costs. As required by U.S. GAAP, a portion of the fixed costs at a location are not included in inventory and are expensed as a product cost if production at that location is determined to be abnormally low in any period. Additionally, since the Company's products are often stored at third-party warehousing locations, the Company includes in the cost of inventory the freight and handling costs necessary to move the product to storage until the product is sold to a customer.

*h. Other Current Assets:*

In the fourth quarter of 2015, the Company began marketing certain assets used in farming operations. Management remains committed to sell these assets, and the assets continue to be marketed at a reasonable price. The Company has performed an impairment analysis and concluded that the fair market value of these assets exceeds their carrying value. These assets have been recorded in other current assets in the Consolidated Balance Sheets as of December 31, 2018 and 2017. During the fourth quarter of 2016, a \$2.2 million loss was recognized to record inventory at the lower of cost or market. The loss is included in product cost in the Consolidated Statement of Operations. The amounts classified as held for sale as of December 31, 2018 include property, plant and equipment of approximately \$2.8 million and water rights of approximately \$5.2 million. In addition, other current assets as of December 31, 2018 and 2017 include \$81.5 million and \$21.8 million, respectively, of tax refunds from U.S. taxing authorities pursuant to the tax settlement with Canadian and U.S. tax authorities described in Note 8. The remaining other amounts included in other current assets as of December 31, 2018 and 2017, respectively, consist principally of prepaid expenses.

*i. Property, Plant and Equipment:*

Property, plant and equipment is stated at cost and includes capitalized interest. The costs of replacements or renewals, which improve or extend the life of existing property, are capitalized. Maintenance and repairs are expensed as incurred. Upon retirement or disposition of an asset, any resulting gain or loss is included in the Company's operating results.

Property, plant and equipment also includes mineral interests. The mineral interests for the Company's Winsford U.K. mine are owned. The Company leases probable mineral reserves at its Cote Blanche and Goderich mines, its Utah facility and several of its other North American facilities. These leases have varying terms, and many provide for a royalty payment to the lessor based on a specific amount per ton of mineral extracted or as a percentage of revenue. The Company's rights to extract minerals are contractually limited by time. The Cote Blanche mine is operated under land and mineral leases, and the mineral lease expires in 2060 with two additional 25-year renewal periods. The Goderich mine mineral reserve lease expires in 2022 with the Company's option to renew until 2043 after demonstrating to the lessor that the mine's useful life is greater than the lease's term. The Utah facility mineral reserve lease renews annually. The Company believes it will be able to continue to extend lease agreements as it has in the past, at commercially reasonable terms, without incurring substantial costs or material modifications to the existing lease terms and conditions, and therefore, management believes that assigned lives are appropriate. The Company's mineral interests are depleted on a units-of-production basis based upon the latest available mineral study. The weighted average amortization period for the leased probable mineral reserves is 92 years as of December 31, 2018. The Company also owns other mineral properties. The weighted average life for the probable owned mineral reserves is 38 years as of December 31, 2018 based upon management's current production estimates.

Buildings and structures are depreciated on a straight-line basis over lives generally ranging from 10 to 30 years. Portable buildings generally have shorter lives than permanent structures. Leasehold and building improvements typically have shorter estimated lives of 5 to 20 years or lower based on the life of the lease to which the improvement relates.

Property, plant and equipment recognized as a result of the full acquisition of Produquímica Indústria e Comércio S.A. (“Produquímica,” which is now known as Compass Minerals América do Sul Indústria e Comércio S.A.) (see Note 4) were recorded at fair value as of the acquisition date and are being depreciated based on estimated weighted-average remaining useful lives. The Company’s other fixed assets are amortized on a straight-line basis over their respective lives. The following table summarizes the estimated useful lives of the Company’s different classes of property, plant and equipment:

	<b>Years</b>
Land improvements	10 to 25
Buildings and structures	10 to 30
Leasehold and building improvements	5 to 40
Machinery and equipment – vehicles	3 to 10
Machinery and equipment – other mining and production	3 to 50
Office furniture and equipment	3 to 10
Mineral interests	20 to 99

The Company has capital leases which are recorded in property, plant and equipment at the beginning of the lease at the lower of the fair value of the leased property or the present value of the minimum lease payments. Lease payments are recorded as interest expense and a reduction of the lease liability. A capital lease asset is depreciated over the lower of its useful life or the lease term.

The Company has capitalized computer software costs of \$23.6 million and \$29.5 million as of December 31, 2018 and 2017, respectively, recorded in property, plant and equipment. The capitalized costs are being amortized over five years. The Company recorded \$7.3 million, \$4.7 million and \$3.1 million of amortization expense related to capitalized computer software for 2018, 2017 and 2016, respectively.

The Company recognizes and measures obligations related to the retirement of tangible long-lived assets in accordance with applicable U.S. GAAP. Asset retirement obligations are not material to the Company’s consolidated financial position, results of operations or cash flows.

The Company reviews its long-lived assets and the related mineral reserves for impairment whenever events or changes in circumstances indicate the carrying amounts of such assets may not be recoverable. If an indication of a potential impairment exists, recoverability of the respective assets is determined by comparing the forecasted undiscounted net cash flows of the operation to which the assets relate, to the carrying amount, including associated intangible assets, of such operation. If the operation is determined to be unable to recover the carrying amount of its assets, then intangible assets are written down first, followed by the other long-lived assets of the operation, to fair value. Fair value is determined based on discounted cash flows or appraised values, depending upon the nature of the assets.

*j. Goodwill and Intangible Assets:*

The Company amortizes its intangible assets deemed to have finite lives on a straight-line basis over their estimated useful lives which, for the Company, range from 4 to 50 years. The Company reviews goodwill and other indefinite-lived intangible assets annually for impairment. In addition, goodwill and other intangible assets are reviewed when an event or change in circumstances indicates the carrying amounts of such assets may not be recoverable.

*k. Investments:*

The Company uses the equity method of accounting for equity securities when it has significant influence or when it has more than a minor ownership interest or more than minor influence over an investee’s operations but does not have a controlling financial interest. Initial investments are recorded at cost (including certain transaction costs) and are adjusted by the Company’s share of the investees’ undistributed earnings and losses. The Company may recognize its share of an investee’s earnings on a lag, if an investee’s financial results are not available in a timely manner.

Prior to the full acquisition of Produquímica, which was completed on October 3, 2016, the Company’s initial 35% equity interest in Produquímica was accounted for under the equity method of accounting (see Note 4 for more information). As a result of the full acquisition of Produquímica, the Company now also holds a 50% interest in Fermavi Eletroquímica Ltda. (“Fermavi”), which was previously held by Produquímica. Fermavi, which was founded in 1987, is a Brazilian corporation with headquarters in Varginha, Minas Gerais, Brazil, and its operations focus on the production and sale of manganese-based products. The Company’s investment in Fermavi was recorded at its estimated fair value in conjunction with the preliminary purchase price allocation as of the date the Company completed the full acquisition of Produquímica, which was in excess of the book value of net assets acquired. This basis difference was approximately \$16 million and \$17 million as of December 31, 2018 and 2017, respectively. The portion of the basis differences related to tangible and intangible assets will be amortized over their remaining useful lives, as appropriate. The Company accounts for its investment in Fermavi under the equity method of accounting.

*l. Other Noncurrent Assets:*

Other noncurrent assets include certain inventories of spare parts and related inventory, net of reserve, of \$32.4 million and \$11.8 million at December 31, 2018 and 2017, respectively, which will be utilized with respect to long-lived assets.

The Company sponsors a non-qualified defined contribution plan for certain of its executive officers and key employees as described in Note 9. As of December 31, 2018 and 2017, investments in marketable securities representing amounts deferred by employees, Company contributions and unrealized gains or losses totaling \$1.8 million and \$2.2 million, respectively, were included in other noncurrent assets in the Consolidated Balance Sheets. The marketable securities are classified as trading securities and accordingly, gains and losses are recorded as a component of other expense (income), net in the consolidated statements of operations.

As of December 31, 2017, the Company had \$49.3 million recorded related to tax positions with Canadian and U.S. tax authorities described in Note 8.

*m. Income Taxes:*

The Company accounts for income taxes using the liability method in accordance with the provisions of U.S. GAAP. Under the liability method, deferred taxes are determined based on the differences between the financial statement and the tax basis of assets and liabilities using enacted tax rates in effect in the years in which the differences are expected to reverse. The Company's foreign subsidiaries file separate company returns in their respective jurisdictions.

The Company recognizes potential liabilities in accordance with applicable U.S. GAAP for anticipated tax issues in the U.S. and other tax jurisdictions based on its estimate of whether, and the extent to which, additional taxes will be due. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when the Company determines the liabilities are no longer necessary. If the Company's estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result. Any penalties and interest that are accrued on the Company's uncertain tax positions are included as a component of income tax expense.

In evaluating the Company's ability to realize deferred tax assets, the Company considers the sources and timing of taxable income, including the reversal of existing temporary differences, the ability to carryback tax attributes to prior periods, qualifying tax-planning strategies, and estimates of future taxable income exclusive of reversing temporary differences. In determining future taxable income, the Company's assumptions include the amount of pre-tax operating income according to different state, federal and international taxing jurisdictions, the origination of future temporary differences, and the implementation of feasible and prudent tax-planning strategies.

If the Company determines that a portion of its deferred tax assets will not be realized, a valuation allowance is recorded in the period that such determination is made. In the future, if the Company determines, based on the existence of sufficient evidence, that more or less of the deferred tax assets are more likely than not to be realized, an adjustment to the valuation allowance will be made in the period such a determination is made.

As discussed in Note 8, on December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act (the "Act") which subjects U.S. shareholders, including the Company, to tax on Global Intangible Low-Taxed Income ("GILTI") earned by certain foreign subsidiaries. The FASB issued guidance stating that an entity can make an accounting policy election to either recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. The Company has elected to account for GILTI as a period expense only.

*n. Environmental Costs:*

Environmental costs, other than those of a capital nature, are accrued at the time the exposure becomes known and costs can be reasonably estimated. Costs are accrued based upon management's estimates of all direct costs. Amounts reserved for environmental matters were not material at December 31, 2018 or 2017.

*o. Equity Compensation Plans:*

The Company has equity compensation plans under the oversight of the Company's board of directors, whereby stock options, restricted stock units, performance stock units, deferred stock units and shares of common stock are granted to the Company's employees and directors. See Note 13 for additional discussion.

*p. Earnings per Share:*

The Company's participating securities are accounted for in accordance with guidance related to the computation of earnings per share under the two-class method. The two-class method requires allocating the Company's net earnings to both common shares and participating securities based upon their rights to receive dividends. Basic earnings per share is computed by dividing net earnings available to common shareholders by the weighted-average number of outstanding common shares during the period. Diluted earnings per share reflects the potential dilution that could occur under the more dilutive of either the treasury stock method or the two-class method for calculating the weighted-average number of outstanding common shares. The treasury stock method is calculated assuming unrecognized compensation expense, income tax benefits and proceeds from the potential exercise of employee stock options are used to repurchase common stock.

*q. Derivatives:*

The Company is exposed to the impact of fluctuations in foreign exchange and interest rates on its borrowings and fluctuations in the purchase price of natural gas consumed in operations. The Company hedges portions of these risks through the use of derivative agreements.

The Company accounts for derivative financial instruments in accordance with applicable U.S. GAAP, which requires companies to record derivative financial instruments as assets or liabilities measured at fair value. Accounting for the changes in the fair value of a derivative depends on its designation and effectiveness. Derivatives qualify for treatment as hedges when there is a high correlation between the change in fair value of the derivative instrument and the related change in value of the underlying hedged item. For qualifying hedges, the effective portion of the change in fair value is recognized through earnings when the underlying transaction being hedged affects earnings, allowing a derivative's gains and losses to offset related results from the hedged item in the statements of operations. Until the effective portion of a derivative's change in fair value is recognized in the statement of operations, the changes in fair value is recognized in comprehensive income. For derivative instruments that are not accounted for as hedges, or for the ineffective portions of qualifying hedges, the change in fair value is recorded through earnings in the period of change. The Company formally documents, designates and assesses the effectiveness of transactions that receive hedge accounting treatment initially and on an ongoing basis.

*r. Concentration of Credit Risk:*

The Company sells its salt and magnesium chloride products to various governmental agencies, manufacturers, distributors and retailers primarily in the Midwestern U.S. and throughout Canada and the U.K. The Company's plant nutrition products are sold across the Western Hemisphere and globally. No single customer or group of affiliated customers accounted for more than 10% of the Company's sales in any year during the three-year period ended December 31, 2018, or more than 10% of accounts receivable at December 31, 2018 or 2017.

*s. Recent Accounting Pronouncements:*

In August 2018, the FASB issued guidance to require customers in a cloud computing arrangement that is a service contract to follow the internal use software guidance to determine which implementation costs to capitalize as assets. The capitalized implementation costs related to these arrangements are required to be amortized over the term of the hosting arrangement. The guidance also clarifies the presentation requirements for these costs in an entity's financial statements. The guidance is effective for periods beginning after December 15, 2019 and interim periods within those fiscal years. The Company is currently assessing the impact this guidance will have on its consolidated financial statements.

In February 2018, the FASB issued guidance to address the income tax accounting treatment of the tax effects within other comprehensive income due to the enactment of the Act. This guidance allows entities to elect to reclassify the tax effects of the change in the income tax rates from other comprehensive income to retained earnings. The guidance is effective for periods beginning after December 15, 2018, although early adoption is permitted. The Company adopted this guidance in the first quarter of 2018 and reclassified \$0.2 million of tax benefit to retained earnings.

In August 2017, the FASB issued guidance which amends the current hedge accounting model and requires certain new or modified disclosures to enable entities to better portray the economics of their risk management activities in their financial statements. The modifications include a tabular disclosure related to the effect on the income statement of fair value and cash flow hedges and eliminate the requirement to disclose the ineffective portion of the change in fair value of hedging instruments. The amendments also require new tabular disclosures related to cumulative basis adjustments for fair value hedges. The guidance is effective for fiscal years beginning after December 15, 2018 and interim periods within those fiscal years, although early adoption is permitted. The Company does not expect the adoption of this guidance to have a material impact on its consolidated financial statements.

In March 2017, the FASB issued guidance on the presentation of net periodic pension and postretirement benefit costs in the statement of operations and on the components eligible for capitalization. This guidance requires that an entity report the service cost component of the net periodic benefit costs in the same income statement line item as other compensation costs arising from services rendered by employees during the period. The non-service-cost components of net periodic benefit costs are to be presented in the statement of operations separately from the service cost components and outside a subtotal of income from operations. The guidance also allows for the capitalization of the service cost components, when applicable. The guidance is effective for annual periods beginning after December 15, 2017, including interim periods within those annual periods. The Company adopted this guidance in the first quarter of 2018. The impact of the adoption was not material to the Company's consolidated financial statements.

In January 2017, the FASB issued guidance to simplify the accounting for goodwill impairment. The guidance removes Step 2 of the goodwill impairment test, which requires a hypothetical purchase price allocation. A goodwill impairment will now be the amount by which a reporting unit's carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance will remain largely unchanged. The guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted for annual and interim goodwill

impairment testing dates after January 1, 2017. The Company is currently assessing the impact this guidance will have on its consolidated financial statements.

In August 2016, the FASB issued guidance to clarify how certain cash receipts and payments should be presented and classified in the statement of cash flows. The guidance is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years, and early adoption is permitted. The Company adopted this guidance in the first quarter of 2018. The adoption of this guidance did not have a material impact on the financial statements.

In June 2016, the FASB issued guidance for estimating credit losses on certain types of financial instruments, including trade receivables, by introducing an approach based on expected losses. The expected loss approach will require entities to incorporate considerations of historical information, current information and reasonable and supportable forecasts. The guidance is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, requires a modified retrospective transition method and early adoption is permitted. The Company is currently evaluating the impact of the adoption of this guidance on its consolidated financial statements.

In February 2016, the FASB issued guidance which requires lessees to recognize on their balance sheet a right-of-use asset which represents a lessee's right to use the underlying asset, and a lease liability initially measured as the present value of minimum lease payments over the term of the lease. In addition, the standard requires expanded qualitative and quantitative disclosures. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, and allows a modified retrospective transition method.

The Company will adopt this guidance on January 1, 2019 using the modified retrospective transition method, which requires any cumulative effect of the change in accounting to be recorded as an adjustment to beginning retained earnings. The Company has revised its controls and processes to ensure compliance with this guidance, including the required disclosures. The Company currently expects to recognize approximately \$47 million to \$52 million of assets and liabilities on its Consolidated Balance Sheets related to the recognition of its operating leases that are in excess of 12 months. The Company does not expect this guidance to have a material effect on its consolidated results of operations or cash flows.

### 3. REVENUES

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As discussed in Note 2, the Company adopted new revenue guidance effective January 1, 2018. The adoption of the guidance resulted in expanded disclosures regarding the nature, amount, timing and uncertainty of revenues and cash flows from contracts with customers.

#### *Nature of Products and Services*

The Company's Salt segment products include salt and magnesium chloride for use in road deicing and dust control, food processing, water softeners, and agricultural and industrial applications. The Company's plant nutrition products include SOP, secondary nutrients, micronutrients and magnesium chloride for agricultural purposes and chemicals for the industrial chemical industry. In the U.K., the Company operates a records management business utilizing excavated areas of the Winsford salt mine with one other location in London, England.

#### *Identifying the Contract*

The Company accounts for a customer contract when there is approval and commitment from both parties, the rights of the parties and payment terms are identified, the contract has commercial substance and collectability of consideration is probable.

#### *Identifying the Performance Obligations*

At contract inception, the Company assesses the goods and services it has promised to its customers and identifies a performance obligation for each promise to transfer to the customer a distinct good or service (or bundle of goods or services). Determining whether products and services are considered distinct performance obligations that should be accounted for separately or aggregated together may require significant judgment.

#### *Identifying and Allocating the Transaction Price*

The Company's revenues are measured based on consideration specified in the customer contract, net of any sales incentives and amounts collected on behalf of third parties such as sales taxes. In certain cases, the Company's customer contracts may include promises to transfer multiple products and services to a customer. For multiple-element arrangements, the Company generally allocates the transaction price to each performance obligation in proportion to its stand-alone selling price.

### *When Performance Obligations Are Satisfied*

The vast majority of the Company's revenues are recognized at a point in time when the performance obligations are satisfied based upon transfer of control of the product or service to a customer. To determine when the control of goods is transferred, the Company typically assesses, among other things, the shipping terms of the contract, as shipping is an indicator of transfer of control. Some of the Company's products are sold when the control of the goods transfers to the customer at the time of shipment. There are also instances when the Company provides shipping services to deliver its products. Shipping and handling costs that occur before the customer obtains control of the goods are deemed to be fulfillment activities and are accounted for as fulfillment costs. The Company has made an accounting policy election to recognize any shipping and handling costs that are incurred after the customer obtains control of the goods as fulfillment costs which are accrued at the time of revenue recognition.

### *Significant Payment Terms*

The customer contract states the final terms of the sale, including the description, quantity and price of each product or service purchased. Payment is typically due in full within 30 days of delivery. As a practical expedient, the Company does not adjust the consideration for the effects of a significant financing component if the Company expects, at contract inception, that the period between when the good or service is transferred to the customer and when the customer pays for that good or service will be one year or less.

### *Refunds, Returns and Warranties*

The Company's products are generally not sold with a right of return and the Company does not generally provide credits or incentives, which may be required to be accounted for as variable consideration when estimating the amount of revenue to be recognized. The Company uses historical experience to estimate accruals for refunds due to manufacturing or other defects.

### *Practical Expedients and Accounting Policy Elections*

Upon adoption of the guidance, the Company elected (i) to exclude disclosures of transaction prices allocated to remaining performance obligations when the Company recognized such revenue for all periods prior to the date of initial application of the new guidance, (ii) not to adjust the amount of consideration for the effects of a significant financing component when the Company expects, at contract inception, that the period between the Company's transfer of a product or service to a customer and when the customer pays for that product or service will be one year or less, (iii) to expense costs to obtain a contract as incurred for costs when the Company expects that the amortization period would have been one year or less, (iv) not to recast revenue for customer contracts that begin and end in the same fiscal period, and (v) not to assess whether promised goods or services are performance obligations if they are immaterial in the context of the customer contract.

See Note 15 for disaggregation of revenue by segment, type and geographical region.

## **4. ACQUISITION**

### *Background and Financing*

On December 16, 2015, Compass Minerals do Brasil Ltda., a wholly-owned subsidiary of the Company ("Compass Minerals Brazil"), entered into (i) a subscription agreement and other covenants (as amended, the "Subscription Agreement") with certain Produquímica shareholders and Produquímica and (ii) a share purchase and sale agreement and other covenants (the "Purchase Agreement") with certain Produquímica shareholders and Produquímica. Pursuant to the Subscription Agreement and the Purchase Agreement, Compass Minerals Brazil acquired 35% of the issued and outstanding capital stock of Produquímica on December 23, 2015, for R\$452.4 million Brazilian reais ("R" or "BRL"), or \$114.1 million U.S. dollars at closing, and paid additional consideration of \$4.7 million in the second quarter of 2016 related to Produquímica's 2015 financial performance.

The Subscription Agreement also contained a put right (the "Put"), allowing the Produquímica shareholders to sell the remainder of their interests in Produquímica to Compass Minerals Brazil. On August 12, 2016, Produquímica shareholders notified Compass Minerals Brazil of their exercise of the Put. On October 3, 2016, the Company acquired the remaining 65% of the issued and outstanding capital stock of Produquímica.

The Company entered into a new \$100.0 million term loan tranche in the fourth quarter of 2015 to fund the acquisition of the 35% of Produquímica's equity. In September 2016, the Company entered into a new \$450.0 million term loan tranche to fund the acquisition of the remaining 65% of Produquímica's equity. See Note 10 for more information regarding these financings.

Based in São Paulo, Brazil, Produquímica operates two primary businesses – agricultural productivity and chemical solutions. The agricultural productivity division manufactures and distributes a broad offering of specialty plant nutrition solution-based products. These include micronutrients, controlled release fertilizers and other specialty supplements that are used in direct soil and foliar applications, as well as through irrigation systems and for seed treatment. Many of these products are developed through Produquímica's research and development capabilities. Produquímica also manufactures and markets specialty chemicals used primarily in the industrial chemical and water treatment industries in Brazil. The acquisition broadens the Company's geographic scope of operations and expands its specialty plant nutrition portfolio while reducing the Company's dependence on winter weather conditions.

*Purchase Price Allocation*

The Company accounted for the Produquímica acquisition as a business combination in accordance with U.S. GAAP. The accounting guidance for business combinations requires estimates and judgments regarding expectations for future cash flows of the acquired entity as well as other valuation assumptions and an allocation to the net assets acquired. The fair values assigned to tangible and intangible assets acquired and liabilities assumed, including contingent consideration, are based on management's best estimates. As of September 30, 2017, the purchase price allocation was finalized.

A summary of the acquisition-date fair value of the consideration transferred is presented in the table below:

<b>Fair Value of Consideration Transferred (in millions)</b>	<b>October 3, 2016</b>
Cash paid at closing	\$ 317.1
Additional cash due at closing	20.6
Fair value of contingent consideration	31.4
Fair value of 35% equity investment	178.7
<b>Total</b>	<b>\$ 547.8</b>

The calculation of the purchase price at closing was based in part on an estimate of full-year 2016 operating results of Produquímica. As of the acquisition closing date, some of the periods included in the 2016 operating results of Produquímica had not ended and actual results were not known. The portion of the purchase price which was based on management's estimate of results relating to periods which occurred after the closing date was classified as contingent consideration. There were no thresholds or tiers in the payment structure, and management used an income approach to estimate the acquisition date fair value of the contingent consideration. As of the closing date, the Company had estimated the fair value of contingent consideration to be \$31.4 million.

During the first quarter of 2017, the purchase price was adjusted based on the final full-year 2016 operating results of Produquímica, and a final payment was made to the Produquímica shareholders. The difference between the estimated closing date fair value of the contingent consideration and the final amount paid resulted in the recognition of a gain of \$1.9 million in the first quarter of 2017, which was included as a component of operating earnings in the Company's Plant Nutrition South America segment.

Prior to the acquisition closing date, the Company accounted for its 35% interest in Produquímica as an equity method investment. The acquisition-date fair value of the previously held equity investment was \$178.7 million and is included in the consideration transferred. To measure the acquisition closing date fair value of the equity interest the Company utilized a market-based approach which relied on Level 3 inputs (see Note 14 for a discussion of the levels in the fair value hierarchy). The Company recognized a \$59.3 million non-cash gain during the fourth quarter of 2016 as a result of remeasuring its prior equity interest in Produquímica held before the business combination.

Under the acquisition method of accounting, the total purchase price was allocated on a preliminary basis to Produquímica's assets and liabilities based upon their estimated fair values as of the closing date of the acquisition. During the first nine months of 2017, the Company adjusted the preliminary purchase price allocation based on additional information obtained regarding facts and circumstances which existed as of the acquisition date. These adjustments resulted in a decrease of \$3.6 million to goodwill, a decrease of \$4.4 million to other noncurrent liabilities and an increase of \$0.8 million to net deferred income taxes. Additionally, during the third quarter of 2017 in connection with finalizing the accounting for the acquisition, the Company recorded an adjustment increasing depreciation expense by \$1.9 million. This adjustment resulted from finalizing the Company's estimate of the useful lives of acquired tangible assets.

Based upon the final purchase price and the updated valuation, the final purchase price allocation is presented in the table below:

<b>Recognized amounts of identifiable assets acquired and liabilities assumed (in millions):</b>	<b>Purchase Price Allocation</b>	
Cash and cash equivalents	\$	73.8
Accounts receivable		89.4
Inventories		77.1
Other current assets		13.7
Property, plant and equipment		189.4
Intangible assets		81.2
Investment in equity method investee		24.5
Other noncurrent assets		6.9
Accounts payable		(27.1)
Accrued expenses		(40.3)
Current portion of long-term debt		(129.6)
Other current liabilities		(14.0)
Long-term debt, net of current portion		(62.0)
Deferred income taxes, net		(66.0)
Other noncurrent liabilities		(21.9)
<b>Total identifiable net assets</b>		<b>195.1</b>
Goodwill		352.7
<b>Total fair value of business combination</b>	<b>\$</b>	<b>547.8</b>

The total purchase price in excess of the net identifiable assets has been recognized as goodwill in the amount of \$352.7 million and has been assigned to the Company's Plant Nutrition South America segment. The goodwill recognized is attributable primarily to expected synergies with the Company's existing plant nutrition business and the assembled workforce of Produquímica. The future deductibility of the goodwill for income tax purposes is uncertain at this time.

The Company determined that the book value of the accounts receivable included in the purchase price allocation approximates their fair value due to their short-term nature. The gross contractual amounts of the receivables exceeded their fair value by the amount of an allowance for doubtful accounts of approximately \$8 million.

In connection with the acquisition, the Company acquired identifiable intangible assets which consisted principally of trade names, developed technologies and customer relationships. The fair values were determined using Level 3 inputs (see Note 14 for a discussion of the levels in the fair value hierarchy). The fair values of the identifiable intangible assets were estimated using an income approach method.

The estimated fair values and weighted average amortization period of the identifiable intangible assets are presented in the table below:

	<b>Estimated Fair Value (in millions)</b>	<b>Weighted-Average Amortization Period (in years)</b>
Trade names	\$ 36.9	11.0
Developed technology	37.5	5.3
Customer relationships	6.8	13.5
<b>Total identifiable intangible assets</b>	<b>\$ 81.2</b>	<b>8.6</b>

#### *Impact on Operating Results*

During the year ended December 31, 2016, Produquímica contributed revenues of \$113.5 million and net income of \$3.6 million since the acquisition date of October 3, 2016. Produquímica contributed sales of \$391.8 million and \$375.0 million during the twelve months ended December 31, 2018 and 2017, respectively. Produquímica contributed net income of \$28.3 million \$43.3 million and during the twelve months ended December 31, 2018 and 2017, respectively.

The following table presents the combined unaudited pro forma results for the full years ended December 31, 2016 and 2015. The pro forma financial information combines the historical results of operations for Produquímica and Compass Minerals as though the acquisition occurred on January 1, 2015. The pro forma information does not purport to represent the actual results of

operations that Produquímica and Compass Minerals would have achieved had the companies been combined during the periods presented nor is the information intended to project the future results of operations. Certain adjustments to Produquímica's historical results have been made to conform to U.S. GAAP, and amounts have been translated to U.S. dollars.

Unaudited Combined Pro Forma Results of Operations (in millions)	Twelve Months Ended,	
	December 31, 2016	December 31, 2015
Revenues	\$ 1,381.3	\$ 1,421.3
Net earnings	\$ 108.1	\$ 128.0

Significant adjustments to the pro forma information above include:

- Adjustments to exclude non-recurring direct incremental costs of the acquisition;
- Adjustments to expenses relating to the financing transactions described above;
- Adjustments to reflect incremental amortization and depreciation from the preliminary allocation of the purchase price;
- Adjustments to reflect certain income tax effects of the acquisition;
- Adjustments to remove net loss related to the previously held 35% equity interest in Produquímica; and
- Adjustment to remove the gain from the remeasurement of the previously held 35% equity interest in Produquímica

The Company incurred acquisition costs of \$1.8 million that were expensed during the year ended December 31, 2016. These costs are included in the "Selling, general and administrative expenses" line item in the Consolidated Statement of Operations.

## 5. INVENTORIES

Inventories consist of the following at December 31 (in millions):

	2018	2017
Finished goods	\$ 202.2	\$ 208.4
Raw materials and supplies	64.4	81.5
Total inventories	\$ 266.6	\$ 289.9

## 6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment consists of the following at December 31 (in millions):

	2018	2017
Land, buildings and structures and leasehold improvements	\$ 580.7	\$ 552.5
Machinery and equipment	983.2	942.3
Office furniture and equipment	54.4	53.1
Mineral interests	168.1	173.1
Construction in progress	118.3	213.4
	1,904.7	1,934.4
Less accumulated depreciation and depletion	(852.7)	(796.3)
Property, plant and equipment, net	\$ 1,052.0	\$ 1,138.1

The cost of leased property, plant and equipment under capital leases included above was \$10.1 million and \$7.2 million as of December 31, 2018 and 2017, respectively, and accumulated depreciation was \$2.7 million and \$2.6 million as of December 31, 2018 and 2017, respectively.

## 7. GOODWILL AND OTHER INTANGIBLE ASSETS

The asset value and accumulated amortization as of December 31, 2018 and 2017 for the finite-lived intangibles assets are as follows (in millions):

	Supply Agreement	SOP Production Rights	Customer/Distributor Relationships	Lease Rights	Trade Names	Developed Technologies	Patents	Other	Total
December 31, 2018									
Gross intangible asset	\$ 26.6	\$ 24.3	\$ 12.5	\$ 1.6	\$ 37.5	\$ 33.8	\$ 15.1	\$ 1.3	\$ 152.7
Accumulated amortization	(4.3)	(14.7)	(4.9)	(0.4)	(7.6)	(16.1)	(6.3)	(0.7)	(55.0)
Net intangible assets	\$ 22.3	\$ 9.6	\$ 7.6	\$ 1.2	\$ 29.9	\$ 17.7	\$ 8.8	\$ 0.6	\$ 97.7

	Supply Agreement	SOP Production Rights	Customer/Distributor Relationships	Lease Rights	Trade Names	Developed Technologies	Patents	Other	Total
December 31, 2017									
Gross intangible asset	\$ 28.9	\$ 24.3	\$ 14.1	\$ 1.8	\$ 43.3	\$ 39.3	\$ 16.5	\$ 1.4	\$ 169.6
Accumulated amortization	(4.0)	(13.7)	(4.3)	(0.4)	(4.8)	(11.0)	(5.5)	(0.6)	(44.3)
Net intangible assets	\$ 24.9	\$ 10.6	\$ 9.8	\$ 1.4	\$ 38.5	\$ 28.3	\$ 11.0	\$ 0.8	\$ 125.3

The estimated lives of the Company's finite-lived intangible assets are as follows:

Intangible asset	Estimated Lives
Supply agreement	50 years
SOP production rights	25 years
Patents	10-20 years
Developed technology	4-7 years
Lease rights	25 years
Customer and distributor relationships	10-14 years
Trademarks	10 years
Noncompete agreements	5 years
Trade names	10-11 years

None of the finite-lived intangible assets have a residual value. Aggregate amortization expense was \$15.0 million in 2018, \$16.2 million in 2017 and \$7.0 million in 2016 and is projected to be between \$8 million and \$14 million per year over the next five years. The weighted average life for the Company's finite-lived intangibles is 18 years.

In addition, the Company had water rights of \$17.7 million as of December 31, 2018 and 2017, and trade names of \$0.5 million and \$0.6 million as of December 31, 2018 and 2017, respectively, which have indefinite lives. In the fourth quarter of 2016, the Company recorded a \$3.1 million impairment of its Wolf Trax trade name acquired in 2014 as part of its annual impairment assessment. The estimated fair value as of October 1, 2016 of the trade name was calculated using Level 3 inputs and an income-based valuation approach. The impairment loss was recorded in its Plant Nutrition North America segment in selling, general and administrative expenses in the Consolidated Statements of Operations.

The Company has goodwill of \$350.8 million and \$405.0 million as of December 31, 2018 and 2017, respectively, in its Consolidated Balance Sheets. The Company has recorded goodwill of \$52.6 million and \$57.3 million as of December 31, 2018 and 2017, respectively, in its Plant Nutrition North America segment. Additionally, the Company has recorded goodwill of \$292.3 million and \$341.6 million as of December 31, 2018 and 2017, respectively, in its Plant Nutrition South America segment. The remaining amounts in both periods were immaterial and recorded in its corporate and other and Salt segment. The decrease in the balance of goodwill from December 31, 2017 was due to changes in foreign currency exchange rates.

## 8. INCOME TAXES

The Company files tax returns in the U.S., Canada, Brazil and the U.K. at the federal and local taxing jurisdictional levels. The Company's U.S. federal tax returns for tax years 2012 forward remain open and subject to examination. Generally, the Company's

state, local and foreign tax returns for years as early as 2002 forward remain open and subject to examination, depending on the jurisdiction.

#### *Tax Cuts and Jobs Act*

On December 22, 2017, the U.S. enacted the Act (which is commonly referred to as “U.S. tax reform”). The Act significantly changes U.S. corporate income tax laws by reducing the U.S. corporate income tax rate to 21% beginning in 2018 and creating a quasi-territorial tax system with a one-time mandatory tax on previously deferred foreign earnings. As of December 31, 2018, the Company has completed its accounting for the tax effects of enactment of the Act. In the fourth quarter of 2017, the Company recorded a reasonable estimated net charge of \$46.8 million, consisting of \$55.2 million related to the one-time mandatory tax on unremitted foreign earnings, offset by a \$8.4 million benefit related to the remeasurement of the Company’s deferred tax liabilities at the new income tax rate. During the fourth quarter of 2018, the Company finalized the accounting for the enactment of the Act and recorded a tax benefit of \$3.0 million, consisting of a \$3.1 million tax benefit related to the one-time mandatory tax on unremitted foreign earnings offset by a \$0.1 million charge related to the remeasurement of the Company’s deferred tax liabilities. Both the 2017 and 2018 tax effects of the Act are included in income tax expense in the Company’s consolidated statements of operations.

Although the unremitted foreign earnings subjected to the one-time mandatory tax on unremitted foreign earnings would not be subject to additional U.S. federal income tax, the Company must still account for the tax consequences of outside basis differences and other tax impacts of our investments in non-U.S. subsidiaries. As the Company was still evaluating how the Act would impact our existing indefinite reinvestment assertion as of December 31, 2017, no deferred tax impacts for this item were recorded in 2017.

In 2018, the Company modified its unremitted earnings assertion and expects to repatriate approximately \$150 million. Tax expense of \$3.4 million has been recorded in 2018 on these amounts. All remaining unremitted earnings of non-U.S. subsidiaries and outside basis differences are considered permanently reinvested.

The following table summarizes the Company’s income tax provision related to earnings for the years ended December 31 (in millions):

	2018	2017	2016
Current:			
Federal	\$ 8.1	\$ 0.5	\$ 27.6
State	4.3	(9.8)	6.7
Foreign	13.1	85.8	11.6
Total current	25.5	76.5	45.9
Deferred:			
Federal	(8.6)	(4.4)	(2.8)
State	(0.5)	(0.5)	(0.7)
Foreign	(7.6)	(11.6)	(7.8)
Total deferred	(16.7)	(16.5)	(11.3)
Total provision for income taxes	\$ 8.8	\$ 60.0	\$ 34.6

The following table summarizes components of earnings before taxes and shows the tax effects of significant adjustments from the expected tax expense computed at the federal statutory rate for the years ended December 31 (in millions):

	<b>2018</b>	<b>2017</b>	<b>2016</b>
Domestic (loss) income	\$ (80.6)	\$ (41.2)	\$ 123.6
Foreign income	158.2	143.9	73.7
Earnings before income taxes	\$ 77.6	\$ 102.7	\$ 197.3
Computed tax at the U.S. federal statutory rate of 21% in 2018, 32.7% in 2017 and 35% in 2016	16.3	33.6	69.1
Foreign income rate differential, mining, and withholding taxes, net of U.S. federal deduction	0.9	1.6	(1.7)
Percentage depletion in excess of basis	(4.7)	(6.4)	(8.6)
Other domestic tax reserves, net of reversals	1.5	—	—
Domestic manufacturers deduction	—	—	(1.4)
State income taxes, net of federal income tax benefit	2.1	0.8	3.9
Change in valuation allowance on deferred tax asset	(5.7)	(23.9)	(1.4)
Interest expense recognition differences	(3.6)	(5.6)	(5.9)
Nontaxable remeasurement gain	—	—	(20.2)
Tax Cuts and Jobs Act of 2017	(3.0)	46.8	—
Tax on repatriated amounts	3.4	—	—
Transfer pricing settlement with taxing authorities	2.2	13.8	—
Other, net	(0.6)	(0.7)	0.8
Provision for income taxes	\$ 8.8	\$ 60.0	\$ 34.6
Effective tax rate	11%	58%	18%

Under U.S. GAAP, deferred tax assets and liabilities are recognized for the estimated future tax effects, based on enacted tax law, of temporary differences between the values of assets and liabilities recorded for financial reporting and tax purposes, and of net operating losses and other carryforwards. The significant components of the Company's deferred tax assets and liabilities were as follows at December 31 (in millions):

	2018	2017
Deferred tax assets:		
Reluz Nordeste Indústria e Comércio Ltda net operating loss carryforwards	\$ 0.6	\$ 0.8
Produquímica Indústria e Comércio S.A. net operating loss carryforwards	7.0	12.9
Other, net	6.8	8.0
Total deferred tax assets before valuation allowance	14.4	21.7
Valuation allowance	(0.6)	(9.0)
Total noncurrent deferred tax assets:	\$ 13.8	\$ 12.7
Deferred tax assets to be netted with deferred tax liabilities:		
Net operating loss carryforwards	\$ 2.1	\$ 2.3
Stock-based compensation	2.9	2.7
Other, net	12.1	9.3
Total deferred tax assets before valuation allowance	17.1	14.3
Valuation allowance	(2.9)	(1.2)
Total deferred tax assets to be netted with deferred tax liabilities	14.2	13.1
Deferred tax liabilities:		
Property, plant and equipment	82.3	98.1
Intangible asset	32.7	42.0
Total deferred tax liabilities	115.0	140.1
Net deferred tax liabilities	\$ 100.8	\$ 127.0

At December 31, 2018 and 2017, the Company had \$27.2 million and \$46.1 million, respectively, of gross foreign federal net operating loss ("NOL") carryforwards that have no expiration date, \$1.2 million and \$5.7 million, respectively, of gross foreign federal NOL carryforwards which expire in 2033 and \$0.2 million and \$0.7 million, respectively, of net operating tax-effected state NOL carryforwards which will expire beginning in 2027.

The Company has recorded a valuation allowance for a portion of its deferred tax asset relating to various tax attributes that it does not believe are, more likely than not to be realized. During the fourth quarter of 2018, the Company determined it is more likely than not that all of its Brazilian deferred tax assets acquired in connection with the acquisition of Produquímica will be used to reduce taxable income. As a result, the Company released the remaining \$7.2 million of valuation allowances during the year ending December 31, 2018. During 2017, the Company released approximately \$25 million of valuation allowances related to its acquisition of Produquímica. As of December 31, 2018 and 2017, the Company's valuation allowance was \$3.5 million and \$10.2 million, respectively. In the future, if the Company determines, based on existence of sufficient evidence, that it should realize more or less of its deferred tax assets, an adjustment to the valuation allowance will be made in the period such a determination is made.

The calculation of the Company's tax liabilities involves dealing with uncertainties in the application of complex tax regulations in multiple jurisdictions. The Company recognizes potential liabilities for unrecognized tax benefits in the U.S. and other tax jurisdictions in accordance with applicable U.S. GAAP, which requires uncertain tax positions to be recognized only if they are more likely than not to be upheld based on their technical merits. The measurement of the uncertain tax position is based on the largest benefit amount that is more likely than not (determined on a cumulative probability basis) to be realized upon settlement of the matter. If payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when the Company determines the liabilities are no longer necessary. If the Company's estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense may result.

The Company's uncertain tax positions primarily relate to transactions and deductions involving U.S., Canadian and Brazilian operations. If favorably resolved, \$41.6 million of unrecognized tax benefits would decrease the Company's effective tax rate. Management believes that it is reasonably possible that unrecognized tax benefits will decrease by approximately \$0.3 million in the next twelve months largely as a result of tax returns being closed to future audits. In the fourth quarter of 2018, the Company's

income tax expense included a benefit of approximately \$1.8 million related to the release of uncertain tax positions due to the expiration of statutes of limitations.

The following table shows a reconciliation of the beginning and ending amount of unrecognized tax benefits (in millions):

	2018	2017	2016
Unrecognized tax benefits:			
Balance at January 1	\$ 67.4	\$ 20.7	\$ 18.3
Additions resulting from current year tax positions	8.0	1.3	0.1
Additions relating to tax positions taken in prior years	2.6	51.7	0.5
Additions relating to current year acquisitions	—	—	2.4
Reductions due to settlements	(25.0)	(4.5)	—
Reductions relating to tax positions taken in prior years	(0.3)	(1.4)	—
Reductions due to expiration of tax years	(1.8)	(0.4)	(0.6)
Balance at December 31	\$ 50.9	\$ 67.4	\$ 20.7

The Company accrues interest and penalties related to its uncertain tax positions within its tax provision. During the years ended December 31, 2018, 2017 and 2016, the Company accrued interest and penalties, net of reversals, of \$(2.1) million, \$11.9 million and \$0.9 million, respectively. As of December 31, 2018 and 2017, accrued interest and penalties included in the Consolidated Balance Sheets totaled \$15.8 million and \$18.0 million, respectively.

The Company has historically considered the undistributed earnings of its foreign subsidiaries to be permanently reinvested. In December 2017, however, U.S. tax reform legislation was enacted, which included a one-time mandatory tax on previously deferred foreign earnings. As such, the Company has revised its permanently reinvested assertion and now expects to repatriate approximately \$150 million of unremitted foreign earnings on which it has recorded \$3.4 million of income tax expense for foreign withholding tax, state income tax net of foreign exchange loss. The Company intends to continue its permanently reinvested assertion on the remaining undistributed earnings of its foreign subsidiaries indefinitely. As of December 31, 2018, the Company has approximately \$173.5 million of non-U.S. undistributed earnings and other outside basis differences on which no deferred taxes have been recorded as the determination of the unrecognized deferred taxes is not practicable.

Canadian provincial tax authorities have challenged tax positions claimed by one of the Company's Canadian subsidiaries and have issued tax reassessments for years 2002-2013. The reassessments are a result of ongoing audits and total approximately \$108.5 million, including interest, through December 31, 2018. The Company disputes these reassessments and plans to continue to work with the appropriate authorities in Canada to resolve the dispute. There is a reasonable possibility that the ultimate resolution of this dispute, and any related disputes for other open tax years, may be materially higher or lower than the amounts the Company has reserved for such disputes. In connection with this dispute, local regulations require the Company to post security with the tax authority until the dispute is resolved. The Company has posted collateral in the form of a \$77.4 million performance bond and has paid \$36.2 million (most of which is recorded in other assets in the Consolidated Balance Sheets), which is necessary to proceed with future appeals or litigation.

The Company expects that it will be required by local regulations to provide security for additional interest on the above unresolved disputed amounts and for any future reassessments issued by these Canadian tax authorities in the form of cash, letters of credit, performance bonds, asset liens or other arrangements agreeable with the tax authorities until the disputes are resolved.

The Company expects that the ultimate outcome of these matters will not have a material impact on its results of operations or financial condition. However, the Company can provide no assurance as to the ultimate outcome of these matters and the impact could be material if they are not resolved in the Company's favor. As of December 31, 2018, the Company believes it has adequately reserved for these reassessments.

Additionally, the Company has other uncertain tax positions as well as assessments and disputed positions with taxing authorities in its various jurisdictions.

#### *Settlements*

Canadian federal and provincial taxing authorities had reassessed the Company for years 2004-2006, which had been previously settled by agreement among the Company, the Canada Revenue Agency ("CRA") and the U.S. Internal Revenue Service ("IRS"). The Company sought to enforce the agreement, which provided the basis upon which the returns were previously filed and settled. In July 2016, a trial commenced in the Tax Court of Canada with respect to the Canadian federal tax issues for these matters, and in March 2017, the Tax Court of Canada ruled in favor of the Company. The decision of the Tax Court of Canada was not appealed by the CRA. As a result, the reassessed Canadian tax, penalties and interest for the Company for years 2004-2006 of approximately \$94.7 million are effectively resolved. The Company is in the process of having certain posted collateral returned in connection with the resolution of the dispute.

In the fourth quarter of 2017, the Company, the CRA and the IRS reached a settlement agreement on transfer pricing for its 2007-2012 tax years. As a result of this settlement, the Company recognized \$13.8 million of tax expense in its 2017 consolidated statement of operations related to the Company's Canadian tax positions for the years 2007-2016. During 2018, in accordance with the agreement, the Company's U.S. subsidiary made intercompany cash payments of \$85.7 million to its Canadian subsidiary and tax payments to Canadian taxing authorities of \$17.5 million, with the remaining \$3.3 million of tax payments to be paid during 2019. Corresponding tax refunds of \$1.7 million were received during 2018 from U.S. taxing authorities with the remaining refund of approximately \$21 million expected in 2019. Additionally, the reassessed Canadian tax, penalties and interest for the Company for years 2007 and 2008 of approximately \$34.2 million are effectively resolved.

In the fourth quarter of 2018, the Company, the CRA and the IRS reached a settlement agreement on transfer pricing and management fees as part of an advanced pricing agreement that covers tax years 2013-2021. The tax expense was previously recognized in 2017. The agreement will result in intercompany cash payments from the Company's U.S. subsidiary to its Canadian subsidiary of \$106.1 million and tax payments to Canadian taxing authorities of \$28.5 million with a corresponding tax refund due from U.S. taxing authorities of \$60.5 million. The timing of the refund is expected to lag the payment to the Canadian tax authorities.

## 9. PENSION PLANS AND OTHER BENEFITS

The Company has a defined benefit pension plan for certain of its U.K. employees. Benefits of this pension plan are based on a combination of years of service and compensation levels. This plan was closed to new participants in 1992. Beginning December 1, 2008, future benefits ceased to accrue for the remaining active employee participants in the pension plan concurrent with the establishment of a defined contribution plan for these employees. In addition, the Company has a defined benefit plan with certain Produquimica employees. The pension assets, obligations and net pension expense related to this plan are immaterial.

The Company's U.K. pension fund investment strategy is to maximize return on investments while minimizing risk. This is accomplished by investing in high-grade equity and debt securities. The Company's portfolio guidelines recommend that equity securities comprise approximately 75% of the total portfolio and that approximately 25% be invested in debt securities. The Company's portfolio has shifted to a smaller proportion of equity funds due to the increased volatility of these funds over the last several years, and it is researching strategies that will reduce volatility, while also maximizing returns. Investment strategies and portfolio allocations are based on the plan's benefit obligations and its funded or underfunded status, expected returns, and the Company's portfolio guidelines and are monitored on a regular basis. The weighted-average asset allocations by asset category are as follows:

Asset Category	Plan Assets at December 31,	
	2018	2017
Cash and cash equivalents	3%	3%
Blended funds	32%	32%
Bond funds	45%	45%
Insurance policy	20%	20%
Total	100%	100%

The fair value of the Company's U.K. pension plan assets at December 31, 2018 and 2017 by asset category (see Note 14 for a discussion regarding fair value measurements) are as follows (in millions):

Asset category:	Market Value at December 31,			
	2018	Level One	Level Two	Level Three
Cash and cash equivalents <sup>(a)</sup>	\$ 1.9	\$ 1.9	\$ —	\$ —
Blended funds <sup>(b)</sup>	19.6	—	19.6	—
Bond funds <sup>(c)</sup> :				
Treasuries	27.3	—	27.3	—
Insurance policy <sup>(d)</sup>	11.9	—	—	11.9
Total Pension Assets	\$ 60.7	\$ 1.9	\$ 46.9	\$ 11.9

Asset category:	Market Value at December 31,			
	2017	Level One	Level Two	Level Three
Cash and cash equivalents <sup>(a)</sup>	\$ 2.2	\$ 2.2	\$ —	\$ —
Blended funds <sup>(b)</sup>	22.3	—	22.3	—
Bond funds <sup>(c)</sup> :				
Treasuries	31.2	—	31.2	—
Insurance policy <sup>(d)</sup>	13.4	—	—	13.4
<b>Total Pension Assets</b>	<b>\$ 69.1</b>	<b>\$ 2.2</b>	<b>\$ 53.5</b>	<b>\$ 13.4</b>

(a) The fair value of cash and cash equivalents is its carrying value.

(b) The Company is invested in a diversified growth fund. The diversified growth fund is valued at the last traded or official close for the underlying equities and bid or mid for the underlying fixed income securities depending on the portfolio benchmark. Where representative prices are unavailable, underlying fixed income investments are valued based on other observable market-based inputs.

(c) This category includes investments in investment-grade fixed-income instruments and funds linked to U.K. treasury notes. The funds are valued using the bid amounts for each fund. All of the Company's bond fund pension assets are invested in U.K.-linked treasuries as of December 31, 2018 and 2017.

(d) The insurance policy has been written by an insurance company with an A+ rating from Standard and Poors. The policy derives its value primarily from its underlying investments which consists of separate funds also managed by the underwriter. The policy's holdings consist primarily of a unit trust fund, which is valued based on its underlying holdings of equities, fixed income securities, cash and derivative instruments. Those underlying investments are valued at bid price on the last business day of the period when available. Other investments use the last available authorized price of the last business day of the period. Unquoted investments are valued based upon the fund manager's opinion of fair value based primarily on other observable market-based inputs. Open positions in derivative contracts or foreign currency transactions are included at their mark to market value. Money market instruments are valued based upon amortized cost. Term deposits are valued at their nominal value.

The changes in Level 3 U.K. pension plan assets for the year ended December 31, 2018 and 2017 were as follows (in millions):

	Value of Insurance Policy
Beginning balance as of January 1, 2017	\$ 11.9
Unrealized gain	0.3
Currency fluctuation adjustment	1.2
Ending balance as of December 31, 2017	\$ 13.4
Unrealized loss	(0.8)
Currency fluctuation adjustment	(0.7)
Ending balance as of December 31, 2018	\$ 11.9

As of December 31, 2018 and 2017, amounts recognized in accumulated other comprehensive income, net of tax, consisted of actuarial net losses of \$4.5 million (including \$5.6 million of accumulated loss less prior service cost of \$1.1 million) and \$3.9 million (including \$5.4 million of accumulated loss less prior service cost of \$1.5 million), respectively. During 2018, the amounts recognized in accumulated other comprehensive (loss) income, net of tax, consisted of actuarial net losses of \$(1.2) million, amortization of loss of \$0.3 million, amortization of prior service cost of \$(0.1) million and foreign exchange of \$0.4 million. During 2017, the amounts recognized in accumulated other comprehensive income (loss), net of tax, consisted of actuarial net gains of \$0.1 million, amortization of loss of \$0.3 million, amortization of prior service cost of \$(0.1) million and foreign exchange of \$(0.5) million. During 2016, the amounts recognized in accumulated other comprehensive income (loss), net of tax, consisted of actuarial net losses of \$(1.0) million, amortization of loss of \$0.3 million, amortization of prior service cost of \$(0.1) million and foreign exchange of \$0.9 million. The Company expects to recognize approximately \$0.4 million (\$0.5 million of amortization of loss less \$0.1 million of prior service cost) of losses from accumulated other comprehensive income as a component of net periodic pension cost in 2019. Total net periodic pension cost (benefit) in 2019 is expected to be \$(0.1) million.

The assumptions used in determining pension information for the plans for the years ended December 31 were as follows:

	2018	2017	2016
Discount rate	2.90%	2.80%	3.80%
Expected return on plan assets	3.70%	3.70%	4.50%

The overall expected long-term rate of return on plan assets is a weighted-average expectation based on the fair value of targeted and expected portfolio composition. The Company considers historical performance and current benchmarks to arrive at expected

long-term rates of return in each asset category. The Company determines its discount rate based on a forward yield curve for a portfolio of high-credit-quality bonds with expected cash flows and an average duration closely matching the expected benefit payments under the plan.

The Company's funding policy is to make the minimum annual contributions required by applicable regulations or agreements with the plan administrator. Management expects total contributions during 2019 will be approximately \$1.7 million. In addition, the Company may periodically make contributions to the plan based upon the underfunded status of the plan or other transactions, which warrant incremental contributions in the judgment of management.

The U.K. pension plan includes a provision whereby supplemental benefits may be available to participants under certain circumstances after case review and approval by the plan trustees. Because instances of this type of benefit have historically been infrequent, the development of the projected benefit obligation and net periodic pension cost has not provided for any future supplemental benefits. If additional benefits are approved by the trustees, it is likely that an additional contribution would be required and the amount of incremental benefits would be expensed by the Company.

The Company expects to pay the following benefit payments (in millions):

Calendar Year	Future Expected Benefit Payments
2019	\$ 2.8
2020	2.9
2021	3.0
2022	3.1
2023	3.2
2024 – 2028	17.3

The following table sets forth pension obligations and plan assets for the Company's defined benefit plan, as of December 31 (in millions):

	2018	2017
Change in benefit obligation:		
Benefit obligation as of January 1	\$ 67.0	\$ 61.7
Interest cost	1.6	1.8
Actuarial (gain) loss	(3.7)	0.2
Plan amendment	0.3	—
Benefits paid	(2.9)	(2.6)
Currency fluctuation adjustment	(3.7)	5.9
Benefit obligation as of December 31	58.6	67.0
Change in plan assets:		
Fair value as of January 1	69.1	62.3
Actual return	(2.3)	2.7
Company contributions	0.7	0.8
Currency fluctuation adjustment	(3.9)	5.9
Benefits paid	(2.9)	(2.6)
Fair value of plan assets as of December 31	60.7	69.1
Overfunded status of the plan	\$ 2.1	\$ 2.1

The Company's defined benefit plan was overfunded as of December 31, 2018 and 2017 and accordingly, \$2.1 million, in each period, has been recorded as a noncurrent asset in the Consolidated Balance Sheets. The accumulated benefit obligation for the defined benefit pension plan was \$58.6 million and \$67.0 million as of December 31, 2018 and 2017, respectively. The plan assets were in excess of the accumulated benefit obligation as of December 31, 2018 and 2017. The vested benefit obligation is the actuarial present value of the vested benefits to which the employee is currently entitled but based on the employee's expected date of retirement. Since all employees are vested, the accumulated benefit obligation and the vested benefit obligation are the same amount.

The Company uses a straight-line methodology of amortization subject to a corridor based upon the higher of the fair value of assets and the pension benefit obligation over a five-year period. The components of net pension expense were as follows for the years ended December 31 (in millions):

	2018	2017	2016
Interest cost on projected benefit obligation	\$ 1.6	\$ 1.8	\$ 2.3
Prior service cost	(0.1)	(0.1)	(0.1)
Expected return on plan assets	(2.5)	(2.4)	(2.8)
Net amortization	0.3	0.4	0.4
Net pension benefit	\$ (0.7)	\$ (0.3)	\$ (0.2)

The Company has defined contribution and pre-tax savings plans (the “Savings Plans”) for certain of its employees. Under each of the Savings Plans, participants are permitted to defer a portion of their compensation. Company matching contributions to the Savings Plans are based on a percentage of employee contributions. Additionally, certain of the Savings Plans have a profit-sharing feature for salaried and non-union hourly employees. The Company contribution to the profit-sharing feature is discretionary and based on the Company’s financial performance and other factors. Expense attributable to all Savings Plans was \$12.6 million, \$13.1 million and \$10.9 million for the years ended December 31, 2018, 2017 and 2016, respectively.

The Savings Plans include a non-qualified plan for certain executive officers and other key employees who are limited in their ability to participate in qualified plans due to existing regulations. These employees are allowed to defer a portion of their compensation, upon which they will be entitled to receive Company contributions despite the limitations imposed by current U.S. regulations for qualified plans. The Company’s contributions to the Savings Plans include Company matching contributions based on a percentage of the employee’s deferred salary, discretionary profit sharing contributions and any investment income (loss) that would have been credited to their account had the contributions been made according to employee-designated investment specifications. Although not required to do so, the Company invests amounts equal to the salary deferrals, the corresponding Company matching contribution and discretionary profit sharing amounts according to the employee-designated investment specifications. As of December 31, 2018 and 2017, investments in marketable securities totaling \$1.8 million and \$2.2 million, respectively, were included in other noncurrent assets with a corresponding deferred compensation liability included in other noncurrent liabilities in the Consolidated Balance Sheets. Compensation expense recorded for the non-qualified plan was immaterial for each of the years ended December 31, 2018, 2017 and 2016, including amounts attributable to investment income, and was included in other, net in the Consolidated Statements of Operations.

**10. LONG TERM DEBT**

Third-party long-term debt consists of the following at December 31 (in millions):

	2018	2017
Term Loans due July 2021	\$ 828.9	\$ 837.4
Revolving Credit Facility due July 2021	197.0	168.9
4.875% Senior Notes due July 2024	250.0	250.0
Banco Rabobank Loan due November 2019	18.1	21.1
Banco Itaú Loans due May 2019 to April 2020	0.8	1.9
Financiadora de Estudos e Projetos Loan due November 2023	9.3	13.1
Banco do Brasil Loan due February 2018	—	0.2
Banco Santander Loan due September 2019	—	19.6
Banco Santander Loan due November 2019	—	24.1
Banco Itaú Loan due March 2019	2.5	12.4
Banco Scotiabank Loan due September 2019	10.3	20.5
3.7% Banco Itaú loan due March 2020	15.4	—
Banco Santander loan due September 2020	20.6	—
Banco Santander loan due October 2020	16.8	—
Other	1.7	—
	1,371.4	1,369.2
Less unamortized debt issuance costs	(6.7)	(6.7)
Total debt	1,364.7	1,362.5
Less current portion	(43.5)	(32.1)
Long-term debt	\$ 1,321.2	\$ 1,330.4

The Company's credit agreement consists of two senior secured term loans and a senior secured revolving credit facility which mature July 1, 2021. Interest on the Company's outstanding credit agreement borrowings is variable based on either the LIBOR or a base rate (defined as the greater of a specified U.S. or Canadian prime lending rate or the federal funds effective rate, increased by 0.5%) plus a margin, which is dependent upon the Company's leverage ratio and the type of term loan borrowing. As of December 31, 2018, the weighted average interest rate was 4.4% on all borrowings outstanding under the credit agreement. The outstanding term loans are payable in quarterly installments of interest and principal and can be prepaid at any time without penalty. The credit agreement requires the Company to maintain certain financial ratios, including a minimum interest coverage ratio and a maximum total leverage ratio. In September 2017, the Company entered into an amendment to its credit agreement, which increased the maximum allowed leverage ratio under the credit agreement through September 2018.

Under the revolving credit facility, \$40 million may be drawn in Canadian dollars and \$10 million may be drawn in British pounds sterling. Additionally, the revolving credit facility includes a sub-limit for short-term letters of credit in an amount not to exceed \$50 million. As of December 31, 2018, there was \$197.0 million outstanding under the revolving credit facility, and, after deducting outstanding letters of credit totaling \$10.6 million, the Company's borrowing availability was \$92.4 million. The Company incurs participation fees related to its outstanding letters of credit and commitment fees on its available borrowing capacity. The rates vary depending on the Company's leverage ratio. Bank fees are not material.

In December 2018, the Company entered into an amendment to its credit agreement, which eased restrictions in certain covenants contained in the agreement. In connection with this amendment, the Company paid fees totaling \$1.4 million (\$1.4 million was capitalized as deferred financing costs with less than \$0.1 million recorded as an expense).

The Company's credit agreement borrowings are secured by substantially all existing and future U.S. assets of the Company, the Goderich mine in Ontario, Canada, and capital stock of certain subsidiaries. As of December 31, 2018, the Company was in compliance with each of its covenants under the credit agreement.

The 4.875% Senior Notes due July 2024 (the "4.875% Notes") are subordinate to the credit agreement borrowings. Interest on the 4.875% Notes is due annually in January and July. The credit agreement and the agreements governing the 4.875% Notes and other indebtedness contain covenants that limit the Company's ability, among other things, to incur additional indebtedness or contingent obligations or grant liens; pay dividends or make distributions to stockholders; repurchase or redeem the Company's stock; make investments or dispose of assets; prepay, or amend the terms of certain junior indebtedness; engage in sale and leaseback transactions; make changes to the Company's organizational documents or fiscal periods; enter into third-party agreements that

limit the Company's ability to grant liens on the Company's assets or make certain intercompany dividends, investments or asset transfers; enter into new lines of business; enter into transactions with the Company's stockholders and affiliates; and acquire the assets of or merge or consolidate with other companies.

The loans related to the Company's Produquímica business in Brazil have maturity dates ranging from March 2019 through November 2023 and bear interest at rates at either a percentage of CDI, an overnight inter-bank lending rate in Brazil, or LIBOR plus a margin. A portion of the loans are denominated in U.S. dollars and a portion of the loans are denominated in Brazilian reais, Produquímica's functional currency. The Company has entered into foreign currency swap agreements in relation to some of these loans whereby the Company agreed to swap interest and principal payments on loans denominated in U.S. dollars for principal and interest payments denominated in Brazilian reais (see Note 11 for further discussion). In September and November 2017, the Company refinanced \$54.3 million of loans it assumed in the Produquímica acquisition using proceeds from approximately \$87 million of new loans. The new loans bear interest rates ranging from 108.7% and 118.0% of CDI and mature in November 2019.

In the first quarter of 2018, the Company entered into a new U.S. dollar denominated loan which matures in March 2020. No material fees were paid in connection with these transactions. A portion of the loans are denominated in U.S. dollars and a portion of the loans are denominated in Brazilian reais. The Company has also entered into foreign currency agreements whereby the Company agreed to swap interest and principal payments on the loans denominated in U.S. dollars for principal and interest payments denominated in Brazilian reais, Produquímica's functional currency (see Note 11 for further discussion).

During the the third quarter of 2018, the Company paid off approximately \$36 million of its Brazilian loans and entered into a new \$20.0 million Brazilian loan. The new variable rate loan bears interest of 117.5% of CDI and matures in September 2020.

In the fourth quarter of 2018, the Company entered into \$18.4 million of loans in Brazil which bear interest at 133.1% of CDI and mature in June and October of 2019.

Future maturities of long-term debt for the years ending December 31, are as follows (in millions):

	<b>Debt Maturity</b>
2019	\$ 43.7
2020	63.3
2021	1,010.8
2022	1.9
2023	1.7
Thereafter	250.0
<b>Total</b>	<b>\$ 1,371.4</b>

## 11. DERIVATIVE FINANCIAL INSTRUMENTS

The Company is subject to various types of market risks, including interest rate risk, foreign currency exchange rate transaction and translation risk and commodity pricing risk. Management may take actions to mitigate the exposure to these types of risks, including entering into forward purchase contracts and other financial instruments. Currently, the Company manages a portion of its commodity pricing and foreign currency exchange rate risks by using derivative instruments. The Company does not seek to engage in trading activities or take speculative positions with any financial instrument arrangement. The Company has entered into natural gas derivative instruments and foreign currency derivative instruments with counterparties it views as creditworthy. However, the Company does attempt to mitigate its counterparty credit risk exposures by, among other things, entering into master netting agreements with some of these counterparties. The Company records derivative financial instruments as either assets or liabilities at fair value in the consolidated balance sheets.

Derivatives qualify for treatment as hedges when there is a high correlation between the change in fair value of the derivative instrument and the related change in value of the underlying hedged item. Depending on the exposure being hedged, the Company must designate the hedging instrument as a fair value hedge, a cash flow hedge or a net investment in foreign operations hedge. For the qualifying derivative instruments that have been designated as hedges, the effective portion of the change in fair value is recognized through earnings when the underlying transaction being hedged affects earnings, allowing a derivative's gains and losses to offset related results from the hedged item in the statements of operations. Any ineffectiveness related to these hedges was not material for any of the periods presented. For derivative instruments that have not been designated as hedges, the entire change in fair value is recorded through earnings in the period of change.

### Natural Gas Derivative Instruments

Natural gas is consumed at several of the Company's production facilities, and a change in natural gas prices impacts the Company's operating margin. The Company's objective is to reduce the earnings and cash flow impacts of changes in market prices of natural gas by fixing the purchase price of up to 90% of its forecasted natural gas usage. It is the Company's policy to consider hedging portions of its natural gas usage up to 36 months in advance of the forecasted purchase. As of December 31, 2018, the Company had entered into natural gas derivative instruments to hedge a portion of its natural gas purchase requirements through December 2019. As of December 31, 2018 and 2017, the Company had agreements in place to hedge forecasted natural gas purchases of 1.0 million and 2.6 million MMBtus, respectively. All natural gas derivative instruments held by the Company as of December 31, 2018 and 2017, qualified and were designated as cash flow hedges. As of December 31, 2018, the Company expects to reclassify from accumulated other comprehensive loss to earnings during the next twelve months \$0.6 million of net losses on derivative instruments related to its natural gas hedges.

### Foreign Currency Swaps not Designated as Hedges

In February 2018, the Company entered into a forward instrument to swap currency denominated in Brazilian reais to Canadian dollars for the amounts borrowed under an intercompany note. The instrument matured in November 2018 and was for a notional amount of approximately \$19.9 million U.S. dollars. The objective of the instrument was to mitigate the foreign currency fluctuation risk related to holding debt denominated in a currency other than Produquímica's functional currency. The instrument was not designated as a hedge. During 2018, the Company recognized a net gain of \$1.5 million in other expense in its Consolidated Statements of Operations for this agreement.

In the latter half of 2018, the Company entered into non-deliverable forward contracts to fix \$11.9 million of its net position in accounts receivable and accounts payable in Brazil that are U.S. dollar denominated. The objective of these instruments is to mitigate the foreign currency fluctuation risk related to the Company's accounts receivable and payable denominated in a currency other than Produquímica's functional currency. These forward contracts are not designated as hedges. During 2018, the Company recognized a net loss of \$1.0 million in other expense in its Consolidated Statements of Operations for these forward contracts.

### Foreign Currency Swaps Designated as Hedges

The Company has entered into U.S. dollar-denominated debt instruments to provide funds for its operations in Brazil (see Note 10 for more information). The Company may also concurrently enter into foreign currency agreements whereby the Company agrees to swap interest and principal payments on loans denominated in U.S. dollars for principal and interest payments denominated in Brazilian reais, Produquímica's functional currency. The objective of the swap agreements is to mitigate the foreign currency fluctuation risk related to holding debt denominated in a currency other than Produquímica's functional currency. As of December 31, 2018, the Company had swap agreements in place to hedge \$28.5 million of loans denominated in currencies other than Produquímica's functional currency. Payments on these loans are due on various dates extending through March 2020. As of December 31, 2018, these foreign currency derivative instruments qualified and were designated as cash flow hedges. As of December 31, 2018, the Company expects to reclassify from accumulated other comprehensive loss to earnings during the next twelve months \$2.2 million of net gains on derivative instruments related to these foreign currency swap agreements.

The following tables present the fair value of the Company's derivatives as of December 31, 2018, and 2017 (in millions):

Derivatives designated as hedging instruments:	Asset Derivatives		Liability Derivatives	
	Balance Sheet Location	December 31, 2018	Balance Sheet Location	December 31, 2018
Commodity contracts	Other current assets	\$ —	Accrued expenses	\$ 0.6
Swap contracts	Other current assets	2.2	Accrued expenses	—
Swap contracts	Other assets	2.3	Other noncurrent liabilities	—
<b>Total derivatives designated as hedging instruments<sup>(a)(b)</sup></b>		<b>\$ 4.5</b>		<b>\$ 0.6</b>

(a) The Company has master netting agreements with its commodity hedge counterparties and accordingly has netted in its Consolidated Balance Sheets less than \$0.1 million of its commodity contracts that are in a receivable position against its contracts in payable positions.

(b) The Company has both commodity hedge and foreign currency swap agreements with two counterparties each. Amounts recorded as liabilities for the Company's commodity contracts are payable to both counterparties, and amounts recorded as assets for the Company's swap contracts are receivable from both counterparties.

Derivatives designated as hedging instruments:	Asset Derivatives		Liability Derivatives	
	Balance Sheet Location	December 31, 2017	Balance Sheet Location	December 31, 2017
Commodity contracts	Other current assets	\$ —	Accrued expenses	\$ 1.0
Commodity contracts	Other assets	—	Other noncurrent liabilities	0.4
Swap contracts	Other current assets	0.9	Accrued expenses	—
Swap contracts	Other assets	0.4	Other noncurrent liabilities	—
<b>Total derivatives designated as hedging instruments<sup>(a)(b)</sup></b>		<b>\$ 1.3</b>		<b>\$ 1.4</b>

(a) The Company has master netting agreements with its commodity hedge counterparties and accordingly has netted in its Consolidated Balance Sheets less than \$0.1 million of its commodity contracts that are in a receivable position against its contracts in payable positions.

(b) The Company has both commodity hedge and foreign currency swap agreements with two counterparties each. Amounts recorded as liabilities for the Company's commodity contracts are payable to both counterparties, and amounts recorded as assets for the Company's swap contracts are receivable from both counterparties.

The following tables present activity related to the Company's other comprehensive income before taxes for the twelve months ended December 31, 2018 and 2017 (in millions):

Derivatives in Cash Flow Hedging Relationships	Location of Gain (Loss) Reclassified from Accumulated OCI Into Income (Effective Portion)	Twelve Months Ended December 31, 2018	
		Amount of (Gain) Loss Recognized in OCI on Derivative (Effective Portion)	Amount of Gain (Loss) Reclassified from Accumulated OCI Into Income (Effective Portion)
Commodity contracts	Product cost	\$ (0.7)	\$ (0.2)
Swap contracts	Interest expense	(2.6)	3.0
<b>Total</b>		<b>\$ (3.3)</b>	<b>\$ 2.8</b>

Derivatives in Cash Flow Hedging Relationships	Location of Gain (Loss) Reclassified from Accumulated OCI Into Income (Effective Portion)	Twelve Months Ended December 31, 2017	
		Amount of (Gain) Loss Recognized in OCI on Derivative (Effective Portion)	Amount of Gain (Loss) Reclassified from Accumulated OCI Into Income (Effective Portion)
Commodity contracts	Product cost	\$ 3.0	\$ (0.6)
Swap contracts	Interest expense	(1.9)	1.9
<b>Total</b>		<b>\$ 1.1</b>	<b>\$ 1.3</b>

## 12. COMMITMENTS AND CONTINGENCIES

### *Contingent Obligations:*

The Company was involved in proceedings alleging unfair labor practices at its Cote Blanche, Louisiana, mine. This matter arose out of a labor dispute between the Company and the United Steelworkers Union over the terms of a contract for certain employees at the mine. These employees initiated a strike that began on April 7, 2010, and ended on June 15, 2010. In September 2012, the U.S. National Labor Relations Board (the "NLRB") issued a decision finding that the Company had committed unfair labor practices in connection with the labor dispute. Under the ruling, the Company is responsible for back pay to affected employees as a result of changes made in union work rules and past practices beginning April 1, 2010. In the fourth quarter of 2013, this ruling was upheld by an appeals court. As of December 31, 2016, the Company had recorded a reserve of \$7.4 million in its consolidated financial statements related to expected payments, including interest, required to resolve the dispute.

In March 2017, the Company reached a settlement with the United Steelworkers Union and the NLRB with respect to this matter. Under the terms of the agreement, the Company paid \$7.7 million to the affected employees in the second quarter of 2017. As a result of the settlement, the Company recognized an immaterial loss in its consolidated financial statements in 2017.

On July 16, 2018, the Company's unionized employees at its Goderich mine ratified a three-year collective bargaining agreement, ending a strike that began on April 27, 2018.

The Wisconsin Department of Agriculture, Trade and Consumer Protection ("DATCP") has information indicating that agricultural chemicals are present within the subsurface area of the Company's Kenosha, Wisconsin plant. The agricultural chemicals were used by previous owners and operators of the site. None of the identified chemicals have been used in association

with the Company's operations since it acquired the property in 2002. DATCP directed the Company to conduct further investigations into the possible presence of agricultural chemicals in soil and ground water at the Kenosha plant. The Company has completed initial on-property investigations and has provided the findings to DATCP. All investigations and mitigation activities to date, and any potential future remediation work, are being conducted under the Wisconsin Agricultural Chemical Cleanup Program (the "ACCP"), which provides for reimbursement of some of the costs. The Company may seek participation by, or cost reimbursement from, other parties responsible for the presence of any agricultural chemicals found in soil and ground water at this site if the Company does not receive an acknowledgment of no further action and is required to conduct further investigation or remedial work that may not be eligible for reimbursement under the ACCP.

The Company conducts business operations in several countries and is subject to various federal and local labor, social security, environmental and tax laws. While the Company believes it complies with such laws, they are complex and subject to interpretation. In addition to the tax assessments discussed in Note 8, the Company's Brazilian subsidiaries are party to administrative tax proceedings and claims which totaled \$15.9 million and \$18.1 million as of December 31, 2018 and 2017, respectively, and relate primarily to value added tax, state tax (ICMS) and social security tax (PIS and COFINS) assessments. The Company has assessed the likelihood of a loss at less than probable and therefore, has not established a reserve for these matters. The Company also has assumed liabilities for labor-related matters in connection with the acquisition of Produquímica, which are primarily related to compensation, labor benefits and consequential tax claims and totaled \$7.8 million and \$10.5 million as of December 31, 2018 and 2017, respectively. The Company believes the maximum exposure for these other labor matters totaled approximately \$31 million and \$41 million as of December 31, 2018 and 2017, respectively.

The Company is also involved in legal and administrative proceedings and claims of various types from the ordinary course of the Company's business.

Management cannot predict the outcome of legal claims and proceedings with certainty. Nevertheless, management believes that the outcome of legal proceeding and claims, which are pending or known to be threatened, even if determined adversely, will not, individually or in the aggregate, have a material adverse effect on the Company's results of operations, cash flows or financial position.

Approximately 50% of workforce in the U.S., Canada and the U.K. and approximately 30% of the Company's global workforce is represented by collective bargaining agreements. Of the Company's 13 collective bargaining agreements, five will expire in 2019, four will expire in 2020, three will expire in 2021 and one will expire in 2027. In addition, trade union membership is mandatory in Brazil, where approximately 40% of the Company's global workforce is located.

#### *Commitments:*

*Leases:* The Company leases certain property and equipment under non-cancelable operating leases for varying periods. The aggregate future minimum annual rentals under lease arrangements as of December 31, 2018 are as follows (in millions):

	<b>Operating Leases</b>	
2019	\$	16.4
2020		10.6
2021		5.7
2022		4.4
2023		3.6
Thereafter		14.3
<b>Total</b>	<b>\$</b>	<b>55.0</b>

The Company also leases certain property and equipment under capital lease for various periods. The aggregate future minimum annual rentals under these lease arrangements as of December 31, 2018 are as follows (in millions):

	<b>Capital Leases</b>	
2019	\$	2.3
2020		1.8
2021		1.3
2022		1.1
2023		1.1
Thereafter		4.6
<b>Total</b>	<b>\$</b>	<b>12.2</b>

Rental expense, net of sublease income, was \$24.3 million, \$22.0 million and \$20.4 million for the years ended December 31, 2018, 2017 and 2016, respectively.

*Royalties:* The Company has various private, state and Canadian provincial leases associated with the salt and specialty potash businesses, most of which are renewable by the Company. Many of these leases provide for a royalty payment to the lessor based on a specific amount per ton of mineral extracted or as a percentage of revenue. Royalty expense related to these leases was \$14.8 million, \$14.5 million and \$15.2 million for the years ended December 31, 2018, 2017 and 2016, respectively.

*Performance Bonds:* The Company has various salt and other deicing product sales contracts that include performance provisions governing delivery and product quality. These sales contracts either require the Company to maintain performance bonds for stipulated amounts or contain contractual penalty provisions in the event of non-performance. For the three years ended December 31, 2018, the Company has had no material penalties related to these sales contracts. At December 31, 2018, the Company had \$181.4 million of outstanding performance bonds, which includes the bonds outstanding for the Company's tax reassessments, and \$8.5 million for bank letter guarantees.

*Purchase Commitments:* In connection with the operations of the Company's facilities, the Company purchases utilities, other raw materials and services from third parties under contracts extending, in some cases, for multiple years. Purchases under these contracts are generally based on prevailing market prices. The Company has minimum throughput contracts with some of its depots and warehouses. The purchase commitments for these contracts are estimated to be \$26.2 million for 2019, \$8.6 million in 2020, \$6.7 million in 2021, \$6.2 million in 2022 and \$0.1 million in 2023.

### 13. STOCKHOLDERS' EQUITY AND EQUITY INSTRUMENTS

The Company paid dividends of \$2.88 per share in 2018 and currently intends to continue paying quarterly cash dividends. The declaration and payment of future dividends to holders of the Company's common stock will be at the discretion of the Company's board of directors and will depend upon many factors, including the Company's financial condition, earnings, legal requirements, restrictions in its debt agreements (see Note 10) and other factors the Company's board of directors deems relevant.

#### *Non-Employee Director Compensation*

Non-employee directors may defer all or a portion of the fees payable for their service into deferred stock units, equivalent to the value of the Company's common stock. Additionally, as dividends are declared on the Company's common stock, these deferred stock units are entitled to accrete dividends in the form of additional units based on the stock price on the dividend payment date. Accumulated deferred stock units are distributed in the form of Company common stock at a future specified date or following resignation from the board of directors, based upon the director's annual election. During the years ended December 31, 2018, 2017 and 2016, members of the board of directors were credited with 26,291, 17,207 and 10,078 deferred stock units, respectively. During the years ended December 31, 2018, 2017 and 2016, 6,728, 6,668 and 12,153 shares of common stock, respectively, were issued from treasury shares for director compensation.

#### *Preferred stock*

The Company is authorized to issue up to 10,000,000 shares of preferred stock, of which no shares are currently issued or outstanding. Of those, 200,000 shares of preferred stock were designated as series A junior participating preferred stock in connection with the Company's now expired rights agreement.

#### *Equity Compensation Awards*

In 2005, the Company adopted the 2005 Incentive Award Plan (as amended, the "2005 Plan"), which authorizes the issuance of 3,240,000 shares of Company common stock. In May 2015, the Company's shareholders approved the 2015 Incentive Award Plan (as amended, the "2015 Plan"), which authorizes the issuance of 3,000,000 shares of Company common stock. Since the date the 2015 Plan was approved, the Company ceased issuing equity awards under the 2005 Plan. The 2005 Plan and 2015 Plan allow for grants of equity awards to executive officers, other employees and directors, including shares of common stock, restricted stock units ("RSUs"), performance stock units ("PSUs"), stock options and deferred stock units. The grants occur following approval by the compensation committee of the Company's board of directors, with the amount and terms communicated to employees shortly thereafter.

#### *Options*

Substantially all stock options granted under both the 2005 Plan and 2015 Plan vest ratably, in tranches, over a four-year service period. Unexercised options expire after 7 years. Options do not have dividend or voting rights. Upon vesting, each option can be exercised to purchase one share of the Company's common stock. The exercise price of options is equal to the closing stock price on the day of grant.

To estimate the fair value of options on the grant date, the Company uses the Black-Scholes option valuation model. Award recipients are grouped according to expected exercise behavior. Unless better information is available to estimate the expected term of the options, the estimate is based on historical exercise experience. The risk-free rate, using U.S. Treasury yield curves in effect at the time of grant, is selected based on the expected term of each group. The Company's historical stock price is used to estimate expected volatility. The weighted average assumptions and fair values for options granted for each of the years ended December 31 is included in the following table.

	2018	2017	2016
Fair value of options granted	\$ 8.77	\$ 9.54	\$ 10.17
Expected term (years)	4.5	4.5	4.5
Expected volatility	22.9%	23.2%	24.4%
Dividend yield	3.6%	3.5%	3.3%
Risk-free interest rates	2.5%	1.8%	1.2%

#### *RSUs*

Substantially all of the RSUs granted under the 2015 Plan vest after three years of service entitling the holders to one share of common stock for each vested RSU. The unvested RSUs do not have voting rights but are entitled to receive non-forfeitable dividends (generally after a performance hurdle has been satisfied for the year of the grant) or other distributions that may be declared on the Company's common stock equal to the per-share dividend declared. The closing stock price on the day of grant is used to determine the fair value of RSUs.

#### *PSUs*

Substantially all of the PSUs granted under the 2015 Plan are either total shareholder return PSUs (the "TSR PSUs") or return on invested capital PSUs (the "ROIC PSUs"). The actual number of shares of common stock that may be earned with respect to TSR PSUs is calculated by comparing the Company's total shareholder return to the total shareholder return for each company comprising the Russell 3000 Index over the three-year performance period and may range from 0% to 150% of the target number of shares based upon the attainment of these performance conditions. The actual number of shares of common stock that may be earned with respect to ROIC PSUs is calculated based on the average of the Company's annual return on invested capital for each year in the three-year performance period and may range from 0% to 200% of the target number of shares based upon the attainment of these performance conditions.

ROIC PSUs granted in 2018 have a three-year performance period that begins in 2018 and ends in 2020. TSR PSUs granted in 2018 have a three-year performance period that begins on the grant date and ends on the third anniversary following the grant date. Both types of PSUs granted in 2018 vest three years from the grant date. PSUs represent a target number of shares of Company common stock that may be earned before adjustment based upon the attainment of certain performance conditions. Holders of PSUs are entitled to receive non-forfeitable dividends or other distributions equal to those declared on the Company's common stock for PSUs that are earned, which are paid when the shares underlying the PSUs are issued.

To estimate the fair value of the TSR PSUs on the grant date, the Company uses a Monte-Carlo simulation model, which simulates future stock prices of the Company as well as the companies comprising the Russell 3000 Index. This model uses historical stock prices to estimate expected volatility and the Company's correlation to the Russell 3000 Index. The risk-free rate was determined using the same methodology as the option valuations as discussed above. The Company's closing stock price on the grant date was used to estimate the fair value of the ROIC PSUs. The Company will adjust the expense of the ROIC PSUs based upon its estimate of the number of shares that will ultimately vest at each interim date during the three-year vesting period.

The following is a summary of the Company's stock option, RSU and PSU activity and related information for the following periods:

	Stock Options		RSUs		PSUs	
	Number	Weighted-average exercise price	Number	Weighted-average fair value	Number	Weighted-average fair value
Outstanding at December 31, 2015	353,087	\$ 83.94	91,008	\$ 80.65	77,365	\$ 96.63
Granted	157,887	70.48	34,975	72.06	43,902	73.86
Exercised <sup>(a)</sup>	(11,377)	62.50	—	—	—	—
Released from restriction <sup>(a)</sup>	—	—	(53,983)	75.18	(10,258)	78.49
Cancelled/Expired	(56,842)	80.95	(8,220)	83.16	(21,998)	88.79
Outstanding at December 31, 2016	442,755	\$ 80.07	63,780	\$ 80.25	89,011	\$ 89.43
Granted	227,351	68.00	34,635	68.00	58,878	73.08
Exercised <sup>(a)</sup>	(3,366)	76.03	—	—	—	—
Released from restriction <sup>(a)</sup>	—	—	(15,806)	84.77	(12,946)	105.77
Cancelled/Expired	(103,863)	76.44	(11,753)	71.96	(22,907)	86.81
Outstanding at December 31, 2017	562,877	\$ 75.89	70,856	\$ 74.63	112,036	\$ 79.48
Granted	250,514	59.61	42,013	60.28	67,235	64.30
Exercised <sup>(a)</sup>	—	—	—	—	—	—
Released from restriction <sup>(a)</sup>	—	—	(16,905)	88.78	(2,753)	78.92
Cancelled/Expired	(104,645)	71.65	(12,656)	66.53	(49,880)	85.51
Outstanding at December 31, 2018	708,746	\$ 70.76	83,308	\$ 65.75	126,638	\$ 69.06

(a) Common stock issued for exercised options, vested RSUs and vested and earned PSUs were issued from treasury shares.

As of December 31, 2017, there were 562,877 options outstanding of which 221,212 were exercisable. The following table summarizes information about options outstanding and exercisable at December 31, 2018.

Range of exercise prices	Options Outstanding			Options Exercisable		
	Options outstanding	Weighted-average remaining contractual life (years)	Weighted-average exercise price of options outstanding	Options exercisable	Weighted-average remaining contractual life (years)	Weighted-average exercise price of exercisable options
\$59.50 - \$63.75	221,255	6.3	\$ 59.50	61,809	6.3	\$ 59.50
\$63.76 - \$68.53	163,599	5.1	68.00	90,730	5.0	68.00
\$68.54 - \$71.09	104,807	4.1	70.44	80,971	4.0	70.48
\$71.10 - \$82.09	83,457	1.0	75.64	83,457	1.0	75.64
\$82.10 - \$91.75	135,628	2.7	89.71	129,827	2.7	89.61
Totals	708,746	4.4	\$ 70.76	446,794	3.6	\$ 74.98

During the years ended December 31, 2018, 2017 and 2016, the Company recorded compensation expense of \$7.8 million, \$5.0 million and \$4.9 million, respectively, related to its stock-based compensation awards that are expected to vest. No amounts have been capitalized. The fair value of options vested was \$2.7 million, \$1.4 million and \$1.3 million in 2018, 2017 and 2016, respectively.

As of December 31, 2018, unrecorded compensation cost related to non-vested awards of \$4.7 million is expected to be recognized from 2019 through 2022, with a weighted average period of 2.2 years.

The intrinsic value of stock options exercised during the twelve months ended December 31, 2018, 2017 and 2016 each totaled less than \$0.1 million. As of December 31, 2018, the intrinsic value of options outstanding totaled \$0.0 million, of which 446,794 options with an intrinsic value of \$0.0 million were exercisable. The number of shares held in treasury is sufficient to cover all outstanding equity awards as of December 31, 2018.

#### *Accumulated Other Comprehensive (Loss) Income*

The Company's comprehensive income (loss) is comprised of net earnings, net amortization of the unrealized loss of the pension obligation, the change in the unrealized gain (loss) on natural gas and foreign currency cash flow hedges, and foreign currency translation adjustments. The components of and changes in accumulated other comprehensive income (loss) ("AOCI") for the twelve months ended December 31, 2018 and 2017 are as follows (in millions):

<b>Twelve Months Ended December 31, 2018<sup>(a)</sup></b>	<b>Gains and (Losses) on Cash Flow Hedges</b>	<b>Defined Benefit Pension</b>	<b>Foreign Currency</b>	<b>Total</b>
Beginning balance	\$ (0.9)	\$ (3.9)	\$ (73.1)	\$ (77.9)
Other comprehensive income (loss) before reclassifications	2.2	(0.8)	(132.6)	(131.2)
Amounts reclassified from accumulated other comprehensive loss	(1.8)	0.2	—	(1.6)
Net current period other comprehensive income (loss)	0.4	(0.6)	(132.6)	(132.8)
Reclassification of stranded tax out of AOCI to retained earnings <sup>(b)</sup>	(0.2)	—	—	(0.2)
Ending balance	\$ (0.7)	\$ (4.5)	\$ (205.7)	\$ (210.9)

<b>Twelve Months Ended December 31, 2017<sup>(a)</sup></b>	<b>Gains and (Losses) on Cash Flow Hedges</b>	<b>Defined Benefit Pension</b>	<b>Foreign Currency</b>	<b>Total</b>
Beginning balance	\$ 0.6	\$ (3.7)	\$ (101.8)	\$ (104.9)
Other comprehensive income (loss) before reclassifications	(0.6)	(0.4)	28.7	27.7
Amounts reclassified from accumulated other comprehensive loss	(0.9)	0.2	—	(0.7)
Net current period other comprehensive (loss) income	(1.5)	(0.2)	28.7	27.0
Ending balance	\$ (0.9)	\$ (3.9)	\$ (73.1)	\$ (77.9)

(a) With the exception of the cumulative foreign currency translation adjustment, for which no tax effect is recorded, the changes in the components of accumulated other comprehensive gain (loss) presented in the table are reflected net of applicable income taxes.

(b) In the first quarter of 2018, the Company adopted guidance which allows entities to reclassify tax effects of the change in U.S. income tax rates from AOCI to retained earnings (see Note 2).

<b>Twelve Months Ended December 31, 2018</b>	<b>Amount Reclassified from AOCI</b>	<b>Line Item Impacted in the Consolidated Statement of Operations</b>
<b>Gains and (losses) on cash flow hedges:</b>		
Natural gas instruments	\$ 0.2	Product cost
Foreign currency swaps	(3.0)	Interest expense
Income tax expense (benefit)	1.0	
	(1.8)	
<b>Amortization of defined benefit pension:</b>		
Amortization of loss	\$ 0.2	Product cost
Income tax expense (benefit)	—	
	0.2	
<b>Total reclassifications, net of income taxes</b>	<b>\$ (1.6)</b>	

Twelve Months Ended December 31, 2017	Amount Reclassified from AOCI	Line Item Impacted in the Consolidated Statement of Operations
Gains and (losses) on cash flow hedges:		
Natural gas instruments	\$	0.6 Product cost
Foreign currency swaps		(1.9) Interest Expense
Income tax expense (benefit)		0.4
		(0.9)
Amortization of defined benefit pension:		
Amortization of loss	\$	0.3 Product cost
Income tax expense (benefit)		(0.1)
		0.2
Total reclassifications, net of income taxes	\$	(0.7)

#### 14. FAIR VALUE MEASUREMENTS

The Company's financial instruments are measured and reported at their estimated fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction. When available, the Company uses quoted prices in active markets to determine the fair values for its financial instruments (Level 1 inputs), or absent quoted market prices, observable market-corroborated inputs over the term of the financial instruments (Level 2 inputs). The Company does not have any unobservable inputs that are not corroborated by market inputs (Level 3 inputs) except as stated in Notes 4 and 9.

The Company holds marketable securities associated with its Savings Plans, which are valued based on readily available quoted market prices. The Company also holds short-term investments which are classified as trading securities with any gains or losses recognized through earnings. The Company utilizes derivative instruments to manage its risk of changes in natural gas prices and its risk of changes in foreign currency exchange rates (see Note 11). The fair value of the natural gas derivative instruments and the foreign currency swaps are determined using market data of forward prices for all of the Company's contracts.

The estimated fair values for each type of instrument are presented below (in millions).

	December 31, 2018	Level One	Level Two	Level Three
Asset Class:				
Mutual fund investments in a non-qualified savings plan <sup>(a)</sup>	\$ 1.8	\$ 1.8	\$ —	\$ —
Derivatives - foreign currency swaps, net	4.5	—	4.5	—
<b>Total Assets</b>	<b>\$ 6.3</b>	<b>\$ 1.8</b>	<b>\$ 4.5</b>	<b>\$ —</b>
Liability Class:				
Liabilities related to non-qualified savings plan	\$ (1.8)	\$ (1.8)	\$ —	\$ —
Derivatives - natural gas instruments	(0.6)	—	(0.6)	—
<b>Total Liabilities</b>	<b>\$ (2.4)</b>	<b>\$ (1.8)</b>	<b>\$ (0.6)</b>	<b>\$ —</b>

(a) Includes mutual fund investments of approximately 25% in the common stock of large-cap U.S. companies, 15% in the common stock of small to mid-cap U.S. companies, 5% in the common stock of international companies, 20% in bond funds, 15% in short-term investments and 20% in blended funds.

	December 31, 2017	Level One	Level Two	Level Three
Asset Class:				
Mutual fund investments in a non-qualified savings plan <sup>(a)</sup>	\$ 2.2	\$ 2.2	\$ —	\$ —
Derivatives - foreign currency swaps, net	1.3	—	1.3	—
<b>Total Assets</b>	<b>\$ 3.5</b>	<b>\$ 2.2</b>	<b>\$ 1.3</b>	<b>\$ —</b>
Liability Class:				
Liabilities related to non-qualified savings plan	\$ (2.2)	\$ (2.2)	\$ —	\$ —
Derivatives - natural gas instruments	(1.4)	—	(1.4)	—
<b>Total Liabilities</b>	<b>\$ (3.6)</b>	<b>\$ (2.2)</b>	<b>\$ (1.4)</b>	<b>\$ —</b>

(a) Includes mutual fund investments of approximately 30% in the common stock of large-cap U.S. companies, 15% in the common stock of small to mid-cap U.S. companies, 5% in the common stock of international companies, 10% in bond funds, 20% in short-term investments and 20% in blended funds.

Cash and cash equivalents, accounts receivable (net of reserve for bad debts) and payables are carried at cost, which approximates fair value due to their liquid and short-term nature. The Company's investments related to its nonqualified retirement plan of \$1.8 million and \$2.2 million as of December 31, 2018 and 2017, respectively, are stated at fair value based on quoted market prices. As of December 31, 2018 and 2017, the estimated fair value of the fixed-rate 4.875% Notes, based on available trading information (Level 2), totaled \$226.3 million and \$246.9 million, respectively, compared with the aggregate principal amount at maturity of \$250.0 million. The fair value at December 31, 2018 and 2017 of amounts outstanding under the Credit Agreement, based upon available bid information received from the Company's lender (Level 2), totaled approximately \$1.02 billion and \$989.5 million, respectively, compared with the aggregate principal amount at maturity of \$1.03 billion and \$1.01 billion, respectively.

## 15. OPERATING SEGMENTS

The Company's reportable segments are strategic business units that offer different products and services, and each business requires different technology and marketing strategies. The Company has three reportable segments: Salt, Plant Nutrition North America and Plant Nutrition South America. The Salt segment produces and markets salt and magnesium chloride for use in road deicing and dust control, food processing, water softeners and agricultural and industrial applications. SOP crop nutrients, industrial-grade SOP and micronutrients are produced and marketed through the Plant Nutrition North America segment. In October 2016, the Company acquired Produquímica, which operates two primary businesses in Brazil – agricultural productivity and chemical solutions. See Note 4 for a further discussion of the acquisition. The agricultural productivity division manufactures and distributes a broad offering of specialty plant nutrition solution-based products that are used in direct soil and foliar applications, as well as through irrigation systems and for seed treatment. Produquímica also manufactures and markets specialty chemicals for the industrial chemical industry. The Company's Plant Nutrition South America segment represents the results of the acquired business.

The accounting policies of the segments are the same as those described in the summary of significant accounting policies. All intersegment sales prices are market-based. The Company evaluates performance based on the operating earnings of the respective segments.

Segment information as of and for the years ended December 31, is as follows (in millions):

2018	Salt	Plant Nutrition North America	Plant Nutrition South America	Corporate & Other <sup>(a)</sup>	Total
Sales to external customers	\$ 858.1	\$ 233.2	\$ 391.8	\$ 10.5	\$ 1,493.6
Intersegment sales	—	5.6	3.4	(9.0)	—
Shipping and handling cost	272.4	29.0	18.6	—	320.0
Operating earnings (loss) <sup>(b)</sup>	115.7	25.3	48.7	(59.4)	130.3
Depreciation, depletion and amortization	56.2	48.6	22.2	9.9	136.9
Total assets	948.9	589.3	709.9	119.8	2,367.9
Capital expenditures	58.7	20.7	10.1	7.3	96.8

2017	Salt	Plant Nutrition North America	Plant Nutrition South America	Corporate & Other <sup>(a)</sup>	Total
Sales to external customers	\$ 769.2	\$ 210.0	\$ 375.0	\$ 10.2	\$ 1,364.4
Intersegment sales	—	6.5	—	(6.5)	—
Shipping and handling cost	220.6	28.1	18.8	—	267.5
Operating earnings (loss) <sup>(b)</sup>	138.0	27.7	49.1	(55.6)	159.2
Depreciation, depletion and amortization	55.0	36.9	22.6	7.7	122.2
Total assets	1,030.6	601.1	808.0	131.3	2,571.0
Capital expenditures	65.8	31.9	11.3	5.1	114.1

2016	Salt	Plant Nutrition North America	Plant Nutrition South America <sup>(c)</sup>	Corporate & Other <sup>(a)</sup>	Total
Sales to external customers	\$ 811.9	\$ 203.0	\$ 113.5	\$ 9.6	\$ 1,138.0
Intersegment sales	—	5.2	—	(5.2)	—
Shipping and handling cost	214.5	25.0	5.4	—	244.9
Operating earnings (loss)	200.6	21.1	7.4	(54.5)	174.6
Depreciation, depletion and amortization	46.7	33.4	5.0	5.2	90.3
Total assets	980.3	592.3	844.9	49.0	2,466.5
Capital expenditures	103.4	63.6	2.1	13.1	182.2

Disaggregated revenue by product type is as follows (in millions):

Twelve Months Ended December 31, 2018	Salt	Plant Nutrition North America	Plant Nutrition South America	Corporate & Other <sup>(a)</sup>	Total
Highway Deicing Salt	\$ 532.0	\$ —	\$ —	\$ —	\$ 532.0
Consumer & Industrial Salt	326.1	—	—	—	326.1
SOP and Specialty Plant Nutrients	—	238.8	300.2	—	539.0
Industrial Chemicals	—	—	95.0	—	95.0
Eliminations & Other	—	(5.6)	(3.4)	10.5	1.5
Sales to external customers	\$ 858.1	\$ 233.2	\$ 391.8	\$ 10.5	\$ 1,493.6

Twelve Months Ended December 31, 2017	Salt	Plant Nutrition North America	Plant Nutrition South America	Corporate & Other <sup>(a)</sup>	Total
Highway Deicing Salt	\$ 455.1	\$ —	\$ —	\$ —	\$ 455.1
Consumer & Industrial Salt	314.1	—	—	—	314.1
SOP and Specialty Plant Nutrients	—	216.5	273.6	—	490.1
Industrial Chemicals	—	—	101.4	—	101.4
Eliminations & Other	—	(6.5)	—	10.2	3.7
Sales to external customers	\$ 769.2	\$ 210.0	\$ 375.0	\$ 10.2	\$ 1,364.4

Twelve Months Ended December 31, 2016	Salt	Plant Nutrition North America	Plant Nutrition South America <sup>(c)</sup>	Corporate & Other <sup>(a)</sup>	Total
Highway Deicing Salt	\$ 490.7	\$ —	\$ —	\$ —	\$ 490.7
Consumer & Industrial Salt	321.2	—	—	—	321.2
SOP and Specialty Plant Nutrients	—	208.2	86.8	—	295.0
Industrial Chemicals	—	—	26.7	—	26.7
Eliminations & Other	—	(5.2)	—	9.6	4.4
Sales to external customers	\$ 811.9	\$ 203.0	\$ 113.5	\$ 9.6	\$ 1,138.0

(a) Corporate and Other includes corporate entities, records management operations and other incidental operations and eliminations. Operating earnings (loss) for corporate and other includes indirect corporate overhead including costs for general corporate governance and oversight, as well as costs for the human resources, information technology and finance functions.

(b) In 2018, corporate and other operating results included \$5.1 million for Chief Executive Officer (“CEO”) transition costs. In 2017, operating results include \$4.3 million of restructuring charges.

(c) Plant Nutrition South America’s operating results only include results since October 3, 2016, the date of acquisition.

Financial information relating to the Company's operations by geographic area for the years ended December 31 is as follows (in millions):

<b>Sales</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
United States <sup>(a)</sup>	\$ 769.9	\$ 718.0	\$ 762.6
Canada	238.6	217.7	212.5
Brazil	381.8	362.1	111.7
United Kingdom	83.1	43.3	40.6
Other	20.2	23.3	10.6
<b>Total sales</b>	<b>\$ 1,493.6</b>	<b>\$ 1,364.4</b>	<b>\$ 1,138.0</b>

(a) United States sales exclude product sold to foreign customers at U.S. ports.

Financial information relating to the Company's long-lived assets, excluding the investments related to the nonqualified retirement plan and pension plan assets, by geographic area as of December 31 (in millions):

<b>Long-Lived Assets</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
United States	\$ 551.6	\$ 618.5	\$ 568.5
Canada	497.4	515.9	461.5
United Kingdom	62.5	69.9	66.8
Brazil	524.8	618.4	645.8
Other	6.5	6.5	6.5
<b>Total long-lived assets</b>	<b>\$ 1,642.8</b>	<b>\$ 1,829.2</b>	<b>\$ 1,749.1</b>

## 16. EARNINGS PER SHARE

The two-class method requires allocating the Company's net earnings to both common shares and participating securities. The following table sets forth the computation of basic and diluted earnings per common share (in millions, except for share and per share data):

<b>Year ended December 31,</b>	<b>2018</b>	<b>2017</b>	<b>2016</b>
<b>Numerator:</b>			
Net earnings	\$ 68.8	\$ 42.7	\$ 162.7
Less: Net earnings allocated to participating securities <sup>(a)</sup>	(0.5)	(0.5)	(0.8)
<b>Net earnings available to common shareholders</b>	<b>\$ 68.3</b>	<b>\$ 42.2</b>	<b>\$ 161.9</b>
<b>Denominator (in thousands):</b>			
Weighted average common shares outstanding, shares for basic earnings per share <sup>(b)</sup>	33,848	33,819	33,776
Weighted average equity awards outstanding	—	1	4
<b>Shares for diluted earnings per share</b>	<b>33,848</b>	<b>33,820</b>	<b>33,780</b>
Net earnings per common share, basic	\$ 2.02	\$ 1.25	\$ 4.79
Net earnings per common share, diluted	\$ 2.02	\$ 1.25	\$ 4.79

(a) Participating securities include PSUs and RSUs that receive non-forfeitable dividends. Net earnings were allocated to participating securities of 186,000, 166,000 and 164,000 for 2018, 2017 and 2016, respectively.

(b) For the calculation of diluted earnings per share, the Company uses the more dilutive of either the treasury stock method or the two-class method to determine the weighted average number of outstanding common shares. In addition, the Company had 788,000, 640,000 and 509,000 weighted options outstanding for 2018, 2017 and 2016, respectively, which were anti-dilutive and therefore not included in the diluted earnings per share calculation.

**17. QUARTERLY RESULTS (Unaudited) (in millions, except share and per share data)**

<b>Quarter</b>	<b>First</b>	<b>Second</b>	<b>Third</b>	<b>Fourth</b>
<b>2018</b>				
Sales	\$ 437.9	\$ 246.7	\$ 322.5	\$ 486.5
Gross profit	65.4	42.5	71.4	114.6
Net earnings (loss) <sup>(a)</sup>	12.6	(7.6)	12.8	51.0
Net earnings (loss) per share, basic <sup>(a)</sup>	0.37	(0.23)	0.37	1.50
Net earnings (loss) per share, diluted <sup>(a)</sup>	0.37	(0.23)	0.37	1.50
Basic weighted-average shares outstanding (in thousands)	33,836	33,850	33,851	33,853
Diluted weighted-average shares outstanding (in thousands)	33,836	33,850	33,851	33,853
<b>2017</b>				
Sales	\$ 387.8	\$ 228.0	\$ 290.7	\$ 457.9
Gross profit	81.6	44.9	76.1	124.0
Net earnings (loss) <sup>(a)</sup>	21.5	(6.4)	32.0	(4.4)
Net earnings (loss) per share, basic <sup>(a)</sup>	0.63	(0.19)	0.94	(0.13)
Net earnings (loss) per share, diluted <sup>(a)</sup>	0.63	(0.19)	0.94	(0.13)
Basic weighted-average shares outstanding (in thousands)	33,802	33,823	33,825	33,828
Diluted weighted-average shares outstanding (in thousands)	33,803	33,823	33,825	33,828

(a) In the fourth quarter of 2018, the Company recorded \$5.1 million (\$3.8 million, net of tax) for CEO transition costs. Also, the Company had miscellaneous tax items that reduced income tax expense by \$6.8 million in the fourth quarter of 2018. In connection with U.S. tax reform, the Company recorded a net charge of \$46.8 million during the fourth quarter of 2017. The Company released \$18 million and \$7 million in the third and fourth quarters of 2017, respectively, related to Brazilian valuation allowances that were acquired in the acquisition of Produquímica. See Note 8 for a discussion of tax-related items that impacted 2017 and 2018 results.

**18. SUBSEQUENT EVENT***Dividend Declared:*

On February 13, 2019, the board of directors declared a quarterly cash dividend of \$0.72 per share on the Company's outstanding common stock, unchanged from the quarterly cash dividends paid in 2018. The dividend will be paid on March 15, 2019, to stockholders of record as of the close of business on March 1, 2019.

**ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**ITEM 9A. CONTROLS AND PROCEDURES***Disclosure Controls and Procedures*

The Company maintains disclosure controls and procedures that are designed to provide reasonable assurance that information required to be disclosed in the Company's reports 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 Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to management, including the Company's Interim President and Chief Executive Officer ("Interim CEO") and Chief Financial Officer ("CFO"), as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

In connection with the preparation of this Annual Report on Form 10-K, an evaluation is performed under the supervision and with the participation of the Company's management, including the Interim CEO and CFO, of the effectiveness of the design and operation of the Company's disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2018. Based on that evaluation, the Interim CEO and CFO conclude whether the Company's disclosure controls and procedures are effective as of December 31, 2018, at the reasonable assurance level.

In connection with this Annual Report on Form 10-K for the year ended December 31, 2018, an evaluation was performed of the effectiveness of the design and operation of the Company's disclosure controls and procedures as of December 31, 2018. Based on that evaluation, the Interim CEO and CFO concluded that the disclosure controls and procedures were effective as of December 31, 2018, at the reasonable assurance level.

#### *Management's Report on Internal Control Over Financial Reporting*

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) under the Exchange Act. The 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. 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 conducts an evaluation and assesses the effectiveness of the Company's internal control over financial reporting as of the reporting date. In making its assessment of internal control over financial reporting, management uses the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in *Internal Control-Integrated Framework (2013)*.

A material weakness is a control deficiency, or combination of control deficiencies, that result in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected. As of December 31, 2018, management conducted an evaluation and assessed the effectiveness of the Company's internal control over financial reporting. Based on its evaluation, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2018. Ernst & Young LLP, the Company's independent registered public accounting firm, has audited the Company's Consolidated Financial Statements for the year ended December 31, 2018, and has also issued an audit report dated February 28, 2019, on the effectiveness of the Company's internal control over financial reporting as of December 31, 2018, which is included in this Annual Report on Form 10-K.

#### *Changes in Internal Control Over Financial Reporting*

There have been no changes in the Company's internal control over financial reporting during the most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

## **ITEM 9B. OTHER INFORMATION**

None.

## **PART III**

## **ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

Information regarding the Company's executive officers is included in Part I to this Form 10-K under the caption "Executive Officers of Registrant" and is incorporated herein by reference.

The information required by this item will be included under the captions "Proposal 1—Election of Directors," "Corporate Governance," "Board of Directors and Board Committees" and "Section 16(a) Beneficial Ownership Reporting Compliance" in the Company's proxy statement for its 2019 annual meeting of stockholders (the "2019 Proxy Statement") and is incorporated herein by reference.

### **Code of Ethics and Business Conduct**

The Company has adopted a Code of Ethics and Business Conduct that applies to all employees, including the Company's principal executive officer, principal financial officer and principal accounting officer, as well as members of the Board of Directors of the Company. The Code of Ethics and Business Conduct is available on the Company's website at [www.compassminerals.com](http://www.compassminerals.com). The Company intends to disclose any changes in, or waivers from, this Code of Ethics and Business Conduct by posting such information on the same website or by filing a Current Report on Form 8-K, in each case to the extent such disclosure is required by SEC or New York Stock Exchange rules.

## **ITEM 11. EXECUTIVE COMPENSATION**

The information required by this item will be included under the captions "2018 Non-Employee Director Compensation," "Corporate Governance—Compensation Committee Interlocks and Insider Participation," "Compensation Discussion and

Analysis,” “Compensation Committee Report” and “Executive Compensation Tables” in the 2019 Proxy Statement and is incorporated herein by reference.

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**ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

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The information required by this item will be included under the caption “Stock Ownership of Certain Beneficial Owners and Management” in the 2019 Proxy Statement and is incorporated herein by reference. Information regarding the Company’s equity compensation plans is included in this report under the caption “Equity Compensation Plan Information” and is incorporated herein by reference.

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**ITEM 13. CERTAIN RELATIONSHIPS AND OTHER TRANSACTIONS AND DIRECTOR INDEPENDENCE**

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The information required by this item will be included under the captions “Corporate Governance—Review and Approval of Transactions with Related Persons” and “Board of Directors and Board Committees—Director Independence” in the 2019 Proxy Statement and is incorporated herein by reference.

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**ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

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The information required by this item will be included under the caption “Proposal 3—Ratification of Appointment of Independent Registered Accounting Firm” in the 2019 Proxy Statement and is incorporated herein by reference.

**PART IV****ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

(a)(1) Financial statements and supplementary data required by this Item 15 are set forth below:

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Consolidated Statements of Operations for each of the three years in the period ended December 31, 2018	52
Consolidated Statements of Comprehensive (Loss) Income for each of the three years in the period ended December 31, 2018	53
Consolidated Statements of Stockholders' Equity for each of the three years in the period ended December 31, 2018	54
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(a)(2) Financial Statement Schedule:

**Schedule II — Valuation Reserves**
**Compass Minerals International, Inc.  
December 31, 2018, 2017 and 2016**

Description (in millions)	Balance at the Beginning of the Year	Additions (Deductions) Charged to Expense	Deductions <sup>(1)</sup>	Balance at the End of the Year
Deducted from Receivables — Allowance for Doubtful Accounts				
2018	\$ 10.9	\$ 1.0	\$ (2.0)	\$ 9.9
2017	9.0	3.2	(1.3)	10.9
2016 <sup>(2)</sup>	1.3	8.0	(0.3)	9.0
Deducted from Deferred Income Taxes — Valuation Allowance				
2018	\$ 10.2	\$ 1.8	\$ (8.5)	\$ 3.5
2017	33.6	1.1	(24.5)	10.2
2016 <sup>(3)</sup>	0.9	34.3	(1.6)	33.6

(1) Deduction for purposes for which reserve was created.

(2) The 2016 additions include \$7.4 million related to the acquisition of Produquímica. This amount was not charged to expense.

(3) The 2016 additions relate to the acquisition of Produquímica. This amount was not charged to expense.

## (a)(3) List of Exhibits:

<b>Exhibit No.</b>	<b>Description of Exhibit</b>
2.1	Agreement and Plan of Merger, dated October 13, 2001, among IMC Global Inc., Compass Minerals International, Inc. (formerly known as Salt Holdings Corporation), YBR Holdings LLC and YBR Acquisition Corp (incorporated herein by reference to Exhibit 2.1 to Compass Minerals' Registration Statement on Form S-4, File No. 333-104603).
2.2	Amendment No. 1 to Agreement and Plan of Merger, dated November 28, 2001, among IMC Global Inc., Compass Minerals International, Inc. (formerly known as Salt Holdings Corporation), YBR Holdings LLC and YBR Acquisition Corp (incorporated herein by reference to Exhibit 2.2 to Compass Minerals Registration Statement on Form S-4, File No. 333-104603).
2.3	Subscription Agreement and Other Covenants, dated December 16, 2015, among Compass Minerals do Brasil Ltda., certain shareholders of Produquímica Indústria e Comércio S.A. and Produquímica Indústria e Comércio S.A. (incorporated by reference to Exhibit 2.3 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015).
2.4	Second Amendment, dated August 12, 2016, to the Subscription Agreement and Other Covenants, dated December 16, 2015, among Compass Minerals do Brasil Ltda., certain shareholders of Produquímica Indústria e Comércio S.A. and Produquímica Indústria e Comércio S.A. (incorporated herein by reference to Exhibit 2.1 to Compass Minerals International Inc.'s Current Report on Form 8-K filed on August 15, 2016).
2.5	Share Purchase and Sale Agreement, dated December 16, 2015, among Compass Minerals do Brasil Ltda., certain shareholders of Produquímica Indústria e Comércio S.A. and Produquímica Indústria e Comércio S.A. (incorporated by reference to Exhibit 2.4 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015).
3.1	Amended and Restated Certificate of Incorporation of Compass Minerals International, Inc. (incorporated herein by reference to Exhibit 3.1 to Compass Minerals International, Inc.'s Registration Statement on Form S-4, File No. 333-111953).
3.2	By-laws of Compass Minerals International, Inc., amended and restated as of December 22, 2014 (incorporated herein by reference to Exhibit 3.2 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on December 23, 2014).
4.1	Indenture, dated as of June 23, 2014, by and among Compass Minerals International, Inc., the Guarantors named therein, and U.S. National Bank Association, as trustee, relating to the 4.875% Senior Notes due 2024 (incorporated herein by reference to Exhibit 4.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on June 26, 2014).
4.2	Form of 4.875% Senior Notes due 2024 (included as Exhibit 1 to Exhibit 4.1).
10.1	Salt Mining Lease, dated November 9, 2001, between the Province of Ontario, as lessor, and Sifto Canada Inc. as lessee (incorporated herein by reference to Exhibit 10.1 to Compass Minerals' Registration Statement on Form S-4, File No. 333-104603).
10.2	Amended and Restated Salt and Surface Lease, effective January 1, 2014, between Island Partnership, L.L.C., JMB Cote Blanche L.L.C., CFB, LLC and Carey Salt Company (incorporated herein by reference to Exhibit 10.7 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014).
10.3	Royalty Agreement, dated September 1, 1962, between Great Salt Lake Minerals Corporation and the Utah State Land Board (incorporated herein by reference to Exhibit 10.3 to Compass Minerals' Registration Statement on Form S-4, File No. 333-104603).
10.4	Share Purchase Agreement, dated March 19, 2014, between Compass Minerals Manitoba Inc., Compass Minerals International, Inc. and the shareholders of Wolf Trax Inc. (incorporated herein by reference to Exhibit 10.8 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014).
10.5	Credit Agreement, dated April 20, 2016, among Compass Minerals International, Inc., Compass Minerals Canada Corp., Compass Minerals UK Limited, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
10.6	Incremental Amendment, dated September 28, 2016, to the Credit Agreement, dated April 20, 2016, among Compass Minerals International, Inc., Compass Minerals Canada Corp., Compass Minerals UK Limited, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K dated September 28, 2016).
10.7	Amendment No. 2, dated September 15, 2017, to the Credit Agreement, dated April 20, 2016, among Compass Minerals International, Inc., Compass Minerals Canada Corp., Compass Minerals UK Limited, the lenders party thereto from time to time and JPMorgan Chase Bank, N.A., as administrative agent (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K dated September 18, 2017).

- 10.8** Amendment No. 3, dated December 5, 2018, to the Credit Agreement, dated April 20, 2016, among Compass Minerals International, Inc., Compass Minerals Canada Corp., Compass Minerals UK Limited, JPMorgan Chase Bank, N.A., as administrative agent, and the lenders party thereto (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K dated December 6, 2018).
- 10.9** Certificate of Designation for the Series A Junior Participating Preferred Stock, par value \$0.01 per share (incorporated herein by reference to Exhibit A of Exhibit 4.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on December 19, 2012).
- 10.10+** Compass Minerals International, Inc. Directors' Deferred Compensation Plan, Amended and Restated Effective as of January 1, 2005 (incorporated herein by reference to Exhibit 10.26 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006).
- 10.11+** First Amendment to the Compass Minerals International, Inc. Directors' Deferred Compensation Plan effective January 1, 2007 (incorporated herein by reference to Exhibit 10.28 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2006).
- 10.12+** Second Amendment to the Compass Minerals International, Inc. Directors' Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.4 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2009).
- 10.13+** 2012 Form of Independent Director Deferred Stock Award Agreement (incorporated herein by reference to Exhibit 10.3 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012).
- 10.14+** Amendment to 2012 and 2013 Independent Director Deferred Stock Award Agreement for Eric Ford (incorporated herein by reference to Exhibit 10.15 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2013).
- 10.15+** 2014 Form of Foreign Director Deferred Stock Award Agreement (incorporated herein by reference to Exhibit 10.6 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014).
- 10.16+** 2015 Form of Independent Director Deferred Award Agreement (incorporated by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2015).
- 10.17+** 2015 Form of Independent Foreign Director Deferred Award Agreement (incorporated by reference to Exhibit 10.3 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2015).
- 10.18+** 2017 Form of Non-Employee Director Award Grant Notice (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.19+** Non-Employee Director Compensation Policy, effective January 1, 2017 (incorporated by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on February 2, 2017).
- 10.20+** Summary of Non-Employee Director Compensation, as of January 1, 2017 (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on February 2, 2017).
- 10.21\*+** Summary of Non-Employee Director Compensation, as of January 1, 2019
- 10.22+** Form of Indemnification Agreement for Directors of Compass Minerals International, Inc. (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on March 26, 2009).
- 10.23+** Compass Minerals International, Inc. 2005 Incentive Award Plan as approved by stockholders on August 4, 2005 (incorporated herein by reference to Exhibit 10.15 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2005).
- 10.24+** First Amendment to the Compass Minerals International, Inc. 2005 Incentive Award Plan (incorporated herein by reference to Exhibit 10.5 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2007).
- 10.25+** Second Amendment to the Compass Minerals International, Inc. 2005 Incentive Award Plan (incorporated herein by reference to Exhibit 10.6 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2009).
- 10.26+** Third Amendment to the Compass Minerals International, Inc. 2005 Incentive Award Plan (incorporated herein by reference to Exhibit 10.22 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011).
- 10.27+** Fourth Amendment to the Compass Minerals International, Inc. 2005 Incentive Award Plan (incorporated herein by reference to Exhibit 10.23 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2011).
- 10.28+** Compass Minerals International, Inc. 2015 Incentive Award Plan (incorporated by reference to Exhibit 99.1 to Compass Minerals International, Inc.'s Registration Statement on Form S-8, File No. 333-203922).
- 10.29+** Amendment No. 1 to the Compass Minerals International, Inc. 2015 Incentive Award Plan (incorporated herein by reference to Exhibit 10.3 to Compass Mineral International, Inc.'s Current Report on Form 8-K filed on November 19, 2018).
- 10.30+** 2012 Form of Non-Qualified Stock Option Award Agreement (incorporated herein by reference to Exhibit 10.4 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012).

- 10.31+** 2013 Form of Non-Qualified Stock Option Award Agreement (incorporated herein by reference to Exhibit 10.5 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2013).
- 10.32+** 2014 Form of Non-Qualified Stock Option Award Agreement (incorporated herein by reference to Exhibit 10.4 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2014).
- 10.33+** 2015 Form of Non-Qualified Stock Option Award Agreement (incorporated herein by reference to Exhibit 10.5 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2015).
- 10.34+** 2016 Form of Non-Qualified Stock Option Award Agreement (incorporated by reference to Exhibit 10.4 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
- 10.35+** 2017 Form of Stock Option Grant Notice (incorporated by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.36+** 2016 Form of Restricted Stock Unit Award Agreement (incorporated by reference to Exhibit 10.5 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
- 10.37+** 2017 Form of Restricted Stock Unit Grant Notice (incorporated by reference to Exhibit 10.3 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.38+** 2016 Form of Three-Year Performance Stock Unit Award Agreement (ROIC) (incorporated by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
- 10.39+** 2017 Form of Performance Stock Unit Grant Notice (ROIC) (incorporated by reference to Exhibit 10.4 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.40+** 2016 Form of Three-Year Performance Stock Unit Award Agreement (rTSR) (incorporated by reference to Exhibit 10.3 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
- 10.41+** 2017 Form of Performance Stock Unit Grant Notice (rTSR) (incorporated by reference to Exhibit 10.5 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.42+** 2018 Form of Performance Stock Unit Grant Notice (rTSR) (incorporated by reference to Exhibit 10.1 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018).
- 10.43+** 2016 Rules, Policies and Procedures for Equity Awards Granted to Employees (incorporated by reference to Exhibit 10.6 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2016).
- 10.44+** 2017 Rules, Policies and Procedures for Equity Awards Granted to Employees (incorporated by reference to Exhibit 10.6 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2017).
- 10.45\*+** 2019 Rules, Policies and Procedures for Equity Awards Granted to Employees
- 10.46+** Compass Minerals International, Inc. Restoration Plan, as amended and restated effective January 1, 2018 (incorporated by reference to Exhibit 10.46 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the annual period ended December 31, 2017)
- 10.47+** Addendum to Claims Procedure, effective April 1, 2018, to Compass Minerals International, Inc. Restoration Plan, as amended and restated effective January 1, 2018 (incorporated by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2018).
- 10.48+** 2013 Form of Change in Control Severance Agreement (incorporated by reference to Exhibit 10.44 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the annual period ended December 31, 2016).
- 10.49+** 2017 Form of Restrictive Covenant Agreement (incorporated by reference to Exhibit 10.45 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the annual period ended December 31, 2016).
- 10.50+** Amended and Restated Employment Agreement, effective August 3, 2017, between Compass Minerals International, Inc. and Francis J. Malecha (incorporated herein by reference to Exhibit 10.1 to Compass Minerals International Inc.'s Current Report on Form 8-K filed on August 4, 2017).
- 10.51+** Change in Control Severance Agreement, dated January 17, 2013, between Compass Minerals International, Inc. and Francis J. Malecha (incorporated herein by reference to Exhibit 10.40 to Compass Minerals International, Inc.'s Annual Report on Form 10-K for the annual period ended December 31, 2012).
- 10.52+** Restricted Covenant Agreement, dated August 3, 2017, between Compass Minerals International, Inc. and Francis J. Malecha (incorporated herein by reference to Exhibit 10.2 to Compass Minerals International, Inc.'s Current Report on Form 8-K filed on August 4, 2017).
- 10.53+** Separation Letter Agreement, dated September 14, 2018, between Compass Minerals International, Inc. and Steven N. Berger (incorporated herein by reference to Exhibit 10.1 to Compass Mineral International, Inc.'s Current Report on Form 8-K filed on September 17, 2018).
- 10.54+** Separation Letter Agreement, dated November 19, 2018, between Compass Minerals International, Inc. and Francis J. Malecha (incorporated herein by reference to Exhibit 10.1 to Compass Mineral International, Inc.'s Current Report on Form 8-K filed on November 19, 2018).
- 10.55+** Interim CEO Letter Agreement, dated November 19, 2018, between Compass Minerals International, Inc. and Richard S. Grant (incorporated herein by reference to Exhibit 10.2 to Compass Mineral International, Inc.'s Current Report on Form 8-K filed on November 19, 2018).

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<b>10.56+</b>	Compass Minerals International, Inc. Executive Severance Plan, effective January 1, 2019 (incorporated herein by reference to Exhibit 10.1 to Compass Mineral International, Inc.'s Current Report on Form 8-K filed on December 19, 2018).
<b>21.1*</b>	Subsidiaries of the Registrant.
<b>23.1*</b>	Consent of Ernst & Young LLP.
<b>24.1*</b>	Power of Attorney.
<b>31.1*</b>	Section 302 Certifications of Richard S. Grant, Interim President and Chief Executive Officer.
<b>31.2*</b>	Section 302 Certifications of James D. Standen, Chief Financial Officer.
<b>32**</b>	Certification Pursuant to 18 U.S.C.§1350 of Richard S. Grant, Interim President and Chief Executive Officer, and James D. Standen, Chief Financial Officer.
<b>95*</b>	Mine Safety Disclosures.
<b>101**</b>	The following financial statements from the Compass Minerals International, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2018, formatted in Extensive Business Reporting Language (XBRL): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive (Loss) Income (iv) Consolidated Statement of Stockholders' Equity, (v) Consolidated Statements of Cash Flows, and (vi) the Notes to the Consolidated Financial Statements.

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\* Filed herewith.

\*\* Furnished herewith.

+ Management contracts and compensatory plans or arrangements.

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## **ITEM 16. FORM 10-K SUMMARY**

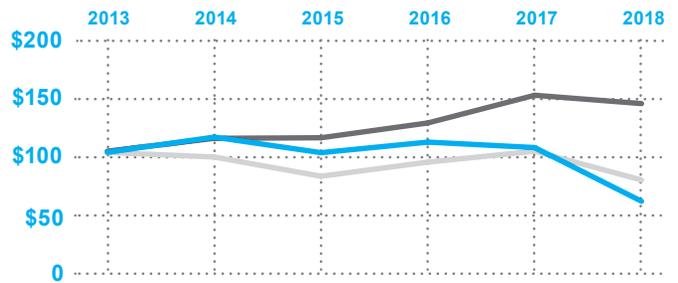
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None.



# CUMULATIVE TOTAL STOCK RETURN

Assumes \$100 invested on December 31, 2012, with dividends reinvested. Compass Minerals uses a market capitalization index because the company does not believe it has a reasonable line-of-business peer group. The peer group index is comprised of companies with market capitalization from \$1 billion to \$3 billion.



	2013	2014	2015	2016	2017	2018
Compass Minerals International, Inc.						
Return %		11.46	-10.60	8.06	-3.86	-39.44
Cum. \$	100	111.46	99.64	107.67	103.51	62.69
Russell 3000 Index						
Return %		12.56	0.48	12.74	21.13	-5.24
Cum. \$	100	112.56	113.10	127.50	154.44	146.34
Peer Group Index						
Return %		-3.58	-15.49	13.48	9.16	-22.19
Cum. \$	100	96.42	81.48	92.47	100.93	78.54

Data complete through last fiscal year. Corporate Performance Graph with peer group uses peer group only performance (excludes only company). Peer group indices use beginning of period market capitalization weighting. Prepared by Zacks Investment Research, Inc. Used with permission. All rights reserved. Copyright 1980-2019. Index Data: Copyright Russell Investments. Used with permission. All rights reserved. Peer Group Index comprised of companies with market capitalization from \$1 to \$3 billion.

Reconciliation for Net Earnings, Excluding Special Items (unaudited, in millions)	Twelve months ended December 31	2016	2017	2018
Net earnings		\$162.7	\$42.7	\$68.8
CEO transition costs, net of tax <sup>(1)</sup>		–	–	3.8
One-time expense from U.S. & Canadian tax settlement		–	13.8	–
Net impact of new U.S. tax law on 2017 <sup>(2)</sup>		–	46.8	(3.0)
Tax benefit of releasing certain deferred tax asset valuation allowances		–	(13.0)	(7.2)
Tax on repatriated monies		–	–	3.4
Restructuring charges, net of tax		–	–	–
Gain from remeasurement of equity method investment		(59.3)	3.0	–
Business acquisition-related items <sup>(3)</sup>		5.6	–	–
Indefinite-lived intangible asset impairment		2.2	–	–
<b>Net earnings, excluding special items</b>		<b>\$111.2</b>	<b>\$93.3</b>	<b>\$65.8</b>

(1) The company incurred certain severance costs related to the transition of Mr. Malecha from his role as Chief Executive Officer and the appointment of Mr. Grant to Interim Chief Executive Officer. These costs related primarily to separation payments and benefits, including the accelerated vesting of certain equity awards.

(2) On December 22, 2017, the U.S. enacted the Tax Cuts and Jobs Act, which significantly changes U.S. corporate income tax laws by reducing the U.S. corporate income tax rate to 21% beginning in 2018 and imposes a one-time mandatory tax on previously deferred foreign earnings. As a result of this tax legislation, the company recorded a provisional net charge of \$46.8 million during the fourth quarter of 2017. In the fourth quarter of 2018, the company finalized the impact of this tax legislation on its 2017 results.

(3) Primarily includes additional expense recognized in the fourth quarter of 2016 from the sale of finished goods inventory, which had its cost basis increased to fair value as a result of the acquisition of Produquímica.

Reconciliation for Adjusted Operating Earnings (unaudited, in millions)	2016	2017	2018
Operating earnings	\$174.6	\$159.2	\$130.3
CEO transition costs <sup>(1)</sup>	–	–	5.1
Restructuring	–	4.3	–
Business acquisition-related items <sup>(2)</sup>	8.4	–	–
Indefinite-lived intangible asset impairment	3.1	–	–
Adjusted operating earnings	\$186.1	\$163.5	\$135.4
Sales	1,138.0	1,364.4	1,493.6
Adjusted operating margin	16.4%	12.0%	9.1%

(1) The company incurred certain severance costs related to the transition of Mr. Malecha from his role as Chief Executive Officer and the appointment of Mr. Grant to Interim Chief Executive Officer. These costs related primarily to separation payments and benefits, including the accelerated vesting of certain equity awards.

(2) Primarily includes additional expense recognized in the fourth quarter of 2016 from the sale of finished goods inventory, which had its cost basis increased to fair value as a result of the acquisition of Produquímica.

This document contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We use words such as “may,” “would,” “could,” “should,” “will,” “likely,” “expect,” “anticipate,” “believe,” “intend,” “plan,” “forecast,” “outlook,” “project,” “estimate” and similar expressions suggesting future outcomes or events to identify forward-looking statements or forward-looking information. These statements are based on the company’s expectations as of March 11, 2019, and involve risks and uncertainties that could cause the company’s actual results to differ materially. The differences could be caused by a number of factors, including, but not limited to, weather conditions, pressure on prices and impact from competitive products, any inability by us to fund necessary capital expenditures or successfully implement any capital projects, foreign exchange rates, the cost and availability of transportation for the distribution of our products, any inability by the company to successfully implement its plans or cost-saving initiatives and the effects of changes in the company’s management. For further information on these and other risks and uncertainties that may affect our business, see the “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Risk Factors” sections of our Annual Report on Form 10-K for the year ended 2018. The company undertakes no obligation to update any forward-looking statements made in this document to reflect future events or developments. Because it is not possible to predict or identify all such factors, this list cannot be considered a complete set of all potential risks or uncertainties.

# OUR CORE PRODUCTS AND MARKETS

## SALT

Salt ensures safety, adds flavor and improves our lives every day. Our salt products include deicing products we sell to governments to help keep roads clear during the winter to keep people safe and commerce moving. In addition to rock salt, we sell magnesium chloride products that melt ice at lower temperatures, are less corrosive on metal and concrete and safer for pets and vegetation than other deicers.

We also provide packaged water care products, animal nutrition products and culinary salt for consumers and industrial food production. Our magnesium chloride is additionally used for road stabilization and dust control for gravel roads and environmentally sensitive areas.

We are the leading salt producer in North America and the United Kingdom with extensive high-grade salt deposits. We leverage these deposits with effective mining techniques and efficient production processes. Our Canadian mine is the world's largest operating salt mine and our mine in the U.K. is the only dedicated salt mine in that country. Our solar evaporation facility at the Great Salt Lake in Utah is the largest U.S. producer of magnesium chloride.

## PLANT NUTRITION

As with human nutrition, plant health requires a variety of mineral inputs to ensure healthy growth. Compass Minerals is a global leader in specialty plant nutrition, including a wide variety of products that contribute to higher yields, improved overall plant health, consistent growth, plant defense, enhanced shelf-life and more.

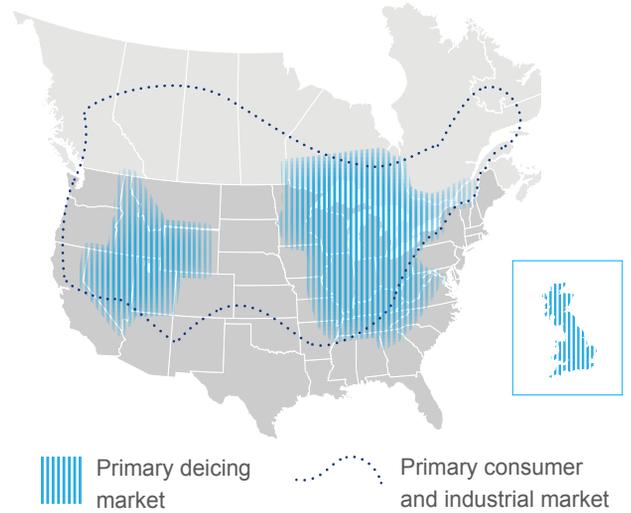
In North America, our core product is sulfate of potash (SOP), a high-value form of potassium that is virtually chloride-free and includes the nutrient sulfur in plant-ready form. We are the No. 1 SOP producer in the Western Hemisphere.

With the 2016 acquisition of Produquímica, we entered South America and now manufacture and market a full portfolio of specialty plant nutrients. In South America, these include micronutrients, specialty blends of primary nutrients, as well as biostimulants and adjuvants. Brazil is our primary market in South America where a consultative sales force backed by agronomic research and proven innovation capabilities sells a significant majority of our products directly to growers. Our team of more than 180 sales associates work with some 30 agronomists to reach more than 4,400 large farmers primarily in central Brazil.

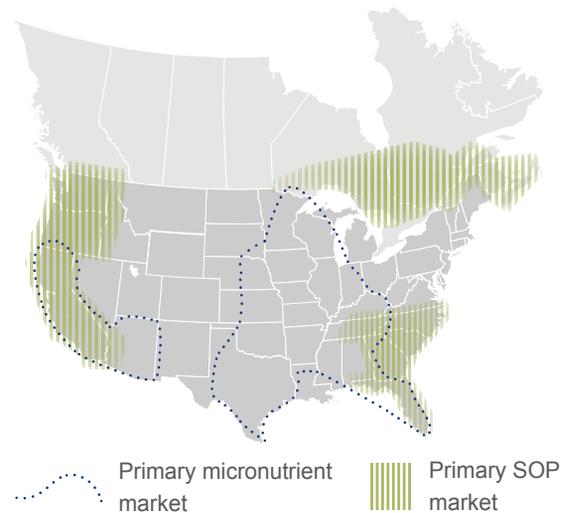
## CHEMICAL SOLUTIONS

Through the acquisition of Produquímica, Compass Minerals gained a chemical solutions business in Brazil. This business manufactures a range of water treatment and chlor-alkali products. Our water treatment customers include state and municipal entities, wastewater treatment companies and manufacturers that treat their own water. Other industrial sectors that benefit from Produquímica chemical solutions include oil and gas exploration, mining, pulp and paper manufacturing and ethanol production.

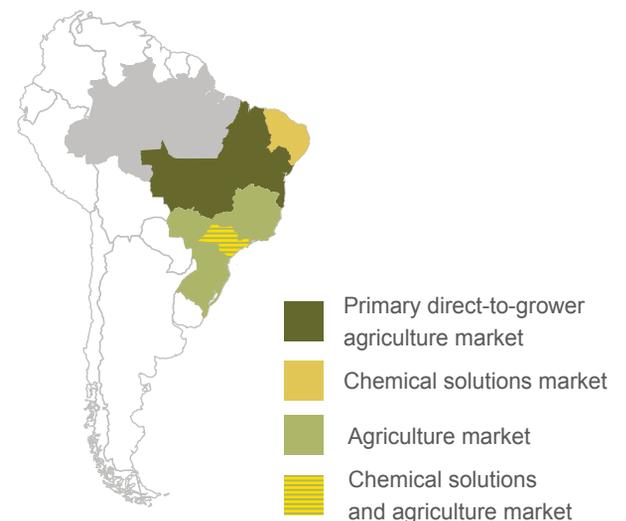
## SALT



## PLANT NUTRITION NORTH AMERICA



## PLANT NUTRITION SOUTH AMERICA



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