VALHI INC /DE/
Form 10-K
March 17, 2014

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 –
For the fiscal year ended December 31, 2013
Commission file number 1-5467

VALHI, INC.

(Exact name of Registrant as specified in its charter)

Delaware	87-0110150
(State or other jurisdiction of Incorporation or organization)	(IRS Employer Identification No.)

5430 LBJ Freeway, Suite 1700, Dallas, Texas	75240-2697
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (972) 233-1700

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

Title of each class	Name of each exchange on which registered
Common stock ($.01 par value per share)	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 x

If the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No x

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 x No ¨

Whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

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. Yes ¨ No x

Whether the Registrant is a large accelerated filer, an accelerated filer or a non-accelerated filer or a smaller reporting company (as defined in Rule 12b-2 of the Act).

Large accelerated filer ¨ Accelerated filer x

non-accelerated filer ¨ smaller reporting company ¨.

Whether the Registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes ¨ No x.

The aggregate market value of the 18.3 million shares of voting common stock held by nonaffiliates of Valhi, Inc. as of June 30, 2013 (the last business day of the Registrant's most recently-completed second fiscal quarter) approximated $251.7 million.

As of March 7, 2014, 339,120,449 shares of the Registrant's common stock were outstanding.

Documents incorporated by reference

The information required by Part III is incorporated by reference from the Registrant's definitive proxy statement to be filed with the Commission pursuant to Regulation 14A not later than 120 days after the end of the fiscal year covered by this report.

PART I

ITEM 1. BUSINESS

Valhi, Inc. (NYSE: VHI) is primarily a holding company. We operate through our wholly-owned and majority-owned subsidiaries, including NL Industries, Inc., Kronos Worldwide, Inc., CompX International Inc. and Waste Control Specialists LLC ("WCS"). Kronos (NYSE: KRO), NL (NYSE: NL) and CompX (NYSE MKT: CIX) each file periodic reports with the U.S. Securities and Exchange Commission ("SEC").

Our principal executive offices are located at Three Lincoln Center, 5430 LBJ Freeway, Suite 1700, Dallas, Texas 75240. Our telephone number is (972) 233-1700. We maintain a worldwide website at www.valhi.net.

Brief History

LLC Corporation, our legal predecessor, was incorporated in Delaware in 1932. We are the successor company of the 1987 merger of LLC Corporation and another entity controlled by Contran Corporation. Contran Corporation and one of its subsidiaries held approximately 94% of Valhi's outstanding common stock at December 31, 2013. Substantially all of Contran's outstanding voting stock is held by family trusts established for the benefit of Lisa K. Simmons and Serena Simmons Connelly, daughters of Harold C. Simmons, and their children (for which Ms. Lisa Simmons and Ms. Connelly are co-trustees) or is held directly by Ms. Lisa Simmons and Ms. Connelly or persons or entities related to them, including their step-mother Annette C. Simmons, the widow of Mr. Simmons. Prior to his death in December 2013, Mr. Simmons served as sole trustee of the family trusts. Under a voting agreement entered into in February 2014 by all of the voting stockholders of Contran, the size of the board of directors of Contran was fixed at five members, each of Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons have the right to designate one of the five members of the Contran board and the other two members of the Contran board must consist of members of Contran management. Ms. Lisa Simmons, Ms. Connelly, and Ms. Annette Simmons each serve as members of the Contran board. The voting agreement expires in February 2017 (unless Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons otherwise mutually agree), and the ability of Ms. Lisa Simmons, Ms. Connelly, and Ms. Annette Simmons to each designate one member of the Contran board is dependent upon each of their continued beneficial ownership of at least 5% of the combined voting stock of Contran. Consequently, Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons may be deemed to control Contran and us.

Key events in our history include:

- 1979—Contran acquires control of LLC;
- 1981—Contran acquires control of our other predecessor company;
- 1982—Contran acquires control of Keystone Consolidated Industries, Inc., a predecessor to CompX;
- 1984—Keystone spins-off an entity that includes what is to become CompX; this entity subsequently merges with LLC;
- 1986—Contran acquires control of NL, which at the time owns 100% of Kronos and a 50% interest in Titanium Metals Corporation ("TIMET");
- 1987—LLC and another Contran controlled company merge to form Valhi, our current corporate structure;
- 1988—NL spins-off an entity that includes its investment in TIMET;
- 1995—WCS begins start-up operations;
- 1996—TIMET completes an initial public offering;
- 2003—NL completes the spin-off of Kronos through the pro-rata distribution of Kronos shares to its shareholders including us;
- 2004 through 2005—NL distributes Kronos shares to its shareholders, including us, through quarterly dividends;

- 2007—We distribute all of our TIMET common stock to our shareholders through a stock dividend;
- 2008—WCS receives a license for the disposal of byproduct material and begins construction of the byproduct facility infrastructure;
- 2009—WCS receives a license for the disposal of Class A, B and C low-level radioactive waste and completes construction of the byproduct facility;
- 2010—Kronos completes a secondary offering of its common stock lowering our ownership of Kronos to 80%;
- 2011—WCS begins construction on its Compact and Federal low-level radioactive waste ("LLRW") and mixed LLRW disposal facilities;
- 2012—WCS completes construction of its Compact and Federal LLRW disposal facilities and commences operations at the Compact facility;
- 2012—In December we sell all of our remaining interest in TIMET and TIMET is no longer our affiliate;
- 2012—In December CompX completes the sale of its furniture components business;
- 2013—WCS commences operations at the Federal LLRW facility; and
- 2013—In December we purchased an additional ownership interest in and became the majority owner of Basic Management, Inc. and The Landwell Company; both companies are now included in our Consolidated Financial Statements effective December 31, 2013.

Unless otherwise indicated, references in this report to "we", "us" or "our" refer to Valhi, Inc. and its subsidiaries, taken as a whole.

Forward-Looking Statements

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, as amended. Statements in this Annual Report that are not historical facts are forward-looking in nature and represent management's beliefs and assumptions based on currently available information. In some cases, you can identify forward-looking statements by the use of words such as "believes," "intends," "may," "should," "could," "anticipates," "expects" or comparable terminology, or by discussions of strategies or trends. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we do not know if these expectations will be correct. Such statements by their nature involve substantial risks and uncertainties that could significantly impact expected results. Actual future results could differ materially from those predicted. The factors that could cause actual future results to differ materially from those described herein are the risks and uncertainties discussed in this Annual Report and those described from time to time in our other filings with the SEC include, but are not limited to, the following:

- Future supply and demand for our products;
- The extent of the dependence of certain of our businesses on certain market sectors;
- The cyclicality of certain of our businesses (such as Kronos' TiO_2 operations);
- Customer and producer inventory levels;
- Unexpected or earlier-than-expected industry expansion;
- Changes in raw material and other operating costs (such as energy, ore and steel costs) and our ability to pass those costs on to our customers or offset them with reductions in other operating costs;
- Changes in the availability of raw materials (such as ore);
- General global economic and political conditions (such as changes in the level of gross domestic product in various regions of the world and the impact of such changes on demand for, among other things, TiO_2 and component products);

- Competitive products and prices, including increased competition from low-cost manufacturing sources (such as China);
- Possible disruption of our business or increases in the cost of doing business resulting from terrorist activities or global conflicts;
- Customer and competitor strategies;
- Potential consolidation of our competitors;
- Potential consolidation of our customers;
- The impact of pricing and production decisions;
- Competitive technology positions;
- The introduction of trade barriers;
- The ability of our subsidiaries to pay us dividends;
- The impact of current or future government regulations (including employee healthcare benefit related regulations);
- Uncertainties associated with new product development and the development of new product features;
- Fluctuations in currency exchange rates (such as changes in the exchange rate between the U.S. dollar and each of the euro, the Norwegian krone and the Canadian dollar) or possible disruptions to our business resulting from potential instability resulting from uncertainties associated with the euro;
- Operating interruptions (including, but not limited to, labor disputes, leaks, natural disasters, fires, explosions, unscheduled or unplanned downtime and transportation interruptions);
- The timing and amounts of insurance recoveries;
- Our ability to renew, amend, refinance or establish credit facilities;
- Our ability to maintain sufficient liquidity;
- The ultimate outcome of income tax audits, tax settlement initiatives or other tax matters;
- Our ultimate ability to utilize income tax attributes or changes in income tax rates related to such attributes, the benefits of which have been recognized under the more-likely-than-not recognition criteria (such as Kronos' ability to utilize its German net operating loss carryforwards);
- Environmental matters (such as those requiring compliance with emission and discharge standards for existing and new facilities, or new developments regarding environmental remediation at sites related to our former operations);
- Government laws and regulations and possible changes therein (such as changes in government regulations which might impose various obligations on former manufacturers of lead pigment and lead-based paint, including NL, with respect to asserted health concerns associated with the use of such products);
- The ultimate resolution of pending litigation (such as NL's lead pigment litigation, environmental and other litigation and Kronos' class action litigation);
- Our ability to comply with covenants contained in our revolving bank credit facilities;
- Our ability to complete and comply with the conditions of our licenses and permits;
- Our ability to successfully defend against any currently-pending or possible future challenge to WCS' operating licenses and permits;
- Unexpected delays in the delivery or licensing of shipping containers being procured by WCS, or in their operational start-up; and

·Possible future litigation.

Should one or more of these risks materialize (or the consequences of such development worsen), or should the underlying assumptions prove incorrect, actual results could differ materially from those currently forecasted or expected. We disclaim any intention or obligation to update or revise any forward-looking statement whether as a result of changes in information, future events or otherwise.

Segments

We have three consolidated operating segments at December 31, 2013:

Chemicals Kronos Worldwide, Inc.	Our chemicals segment is operated through our majority control of Kronos. Kronos is a leading global producer and marketer of value-added titanium dioxide pigments ("TiO_2"), TiO_2 is used to impart whiteness, brightness, opacity and durability to a wide variety of products, including paints, plastics, paper, fibers and ceramics. Additionally, TiO_2 is a critical component of everyday applications, such as coatings, plastics and paper, as well as many specialty products such as inks, foods and cosmetics.
Component Products CompX International Inc.	We operate in the component products industry through our majority control of CompX. CompX is a leading manufacturer of engineered components utilized in a variety of applications and industries. CompX manufactures engineered components that are sold to a variety of industries including recreational transportation (including boats), postal, office and institutional furniture, cabinetry, tool storage, healthcare, gas stations and vending equipment.
Waste Management Waste Control Specialists LLC	WCS is our subsidiary which operates a West Texas facility for the processing, treatment, storage and disposal of a broad range of low-level radioactive, hazardous, toxic and other wastes. WCS obtained a byproduct disposal license in 2008 and began disposal operations at this facility in October 2009. WCS received a low-level radioactive waste disposal license in September 2009. The Compact LLRW disposal facility commenced operations in 2012, and the Federal LLRW commenced operations in 2013.

For additional information about our segments and equity investments see "Part II—Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations" and Notes 2 and 7 to our Consolidated Financial Statements.

CHEMICALS SEGMENT—KRONOS WORLDWIDE, INC.

Business Overview

Through our majority-controlled subsidiary, Kronos, we are a leading global producer and marketer of value-added TiO_2 pigments, a base industrial product used in a wide range of applications. Kronos, along with its distributors and agents, sells and provides technical services for our products to over 4,000 customers in approximately 100 countries with the majority of sales in Europe and North America. We believe we have developed considerable expertise and efficiency in the manufacture, sale, shipment and service of our products in domestic and international markets.

TiO_2 is a white inorganic pigment used in a wide range of products for its exceptional ability to impart whiteness, brightness, opacity and durability. TiO_2 is a critical component of everyday applications, such as coatings, plastics and paper, as well as many specialty products such as inks, food and cosmetics. TiO_2 is widely considered to be superior to alternative white pigments in large part due to its hiding power (or opacity), which is the ability to cover or mask other materials effectively and efficiently. TiO_2 is designed, marketed and sold based on specific end-use applications.

TiO_2 is the largest commercially used whitening pigment because it has a high refractive rating giving it more hiding power than any other commercially produced white pigment. In addition, TiO_2 has excellent resistance to interaction with other chemicals, good thermal stability and resistance to ultraviolet degradation. Although there are other white pigments on the market, we believe there are no effective substitutes for TiO_2 because no other white pigment has the physical properties for achieving comparable opacity and brightness or can be incorporated in as cost-effective a manner. Pigment extenders such as kaolin clays, calcium carbonate and polymeric opacifiers are used together with TiO_2 in a number of end-use markets. However, these products are not able to duplicate the opacity performance characteristics of TiO_2 and we believe these products are unlikely to have a significant impact on the use of TiO_2.

TiO_2 is considered a “quality-of-life” product. Demand for TiO_2 has generally been driven by worldwide gross domestic product and has generally increased with rising standards of living in various regions of the world. According to industry estimates, TiO_2 consumption has grown at a compound annual growth rate of approximately 2.9% since 1990. Per capita consumption of TiO_2 in the United States and Western Europe far exceeds that in other areas of the world, and these regions are expected to continue to be the largest consumers of TiO_2 on a per capita basis. We believe that North America and Western Europe currently account for approximately 20% and 17% of global TiO_2 consumption, respectively. Markets for TiO_2 are generally increasing in South America, Eastern Europe, the Asia Pacific region and China and we believe these are significant markets where we expect continued growth as economies in these regions continue to develop and quality-of-life products, including TiO_2, experience greater demand.

In recent years, global production capacity for TiO_2 has increased primarily due to debottlenecking existing production facilities in the western world and construction of new plants in China. However, during 2008 and 2009, several TiO_2 manufacturers permanently reduced capacity at high operating cost facilities in Europe, North America and China, in part in connection with environmental-related issues. Decreased capacity, along with the decline in customer inventories which occurred in the first half of 2009, led to industry-wide tightness in TiO_2 inventories. As a result of these factors, TiO_2 selling prices began to increase in the second half of 2009 and continued to increase throughout 2010 and 2011. As demand weakened in 2012 as a result of global economic weakness and uncertainty, TiO_2 selling prices decreased. Demand improved in 2013, particularly in Europe, and selling prices began to stabilize. We expect that demand for TiO_2 products will continue to increase as economic conditions improve in the various regions of the world.

Products and End-use Markets

Including our predecessors, we have produced and marketed TiO_2 in North America and Europe, our primary markets, for over 90 years. We believe that we are the largest producer of TiO_2 in Europe with approximately one-half of our sales volumes attributable to markets in Europe. The table below shows our market share for our significant markets, Europe and North America, for the last three years.

	2011		2012		2013	
Europe	19	%	19	%	18	%
North America	17	%	19	%	18	%

We believe that we are the leading seller of TiO_2 in several countries, including Germany, with an estimated 9% share of worldwide TiO_2 sales volume in 2013. Overall, we are one of the top five producers of TiO_2 in the world.

We offer our customers a broad portfolio of products that include over 40 different TiO_2 pigment grades under the Kronos® trademark which provide a variety of performance properties to meet customers' specific requirements. Our major customers include domestic and international paint, plastics, decorative laminate and paper

manufacturers. We ship TiO_2 to our customers in either a powder or slurry form via rail, truck and/or ocean carrier. Sales of our core TiO_2 pigments represented approximately 90% of our net sales in 2013. We and our agents and distributors primarily sell and provide technical services for our products in three major end-use markets: coatings, plastics and paper.

The following tables show our approximate sales volume by geographic region and end use for the year ended December 31, 2013:

Sales volumes percentages by geographic region		Sales volumes percentages by end-use	
Europe	49%	Coatings	54%
North America	33%	Plastics	33%
Asia Pacific	4 %	Other	8 %
Rest of World	14%	Paper	5 %

Some of the principal applications for our products include the following.

TiO_2 for coatings - Our TiO_2 is used to provide opacity, durability, tinting strength and brightness in industrial coatings, as well as coatings for home interiors and exteriors, automobiles, aircraft, machines, appliances, traffic paint and other special purpose coatings. The amount of TiO_2 used in coatings varies widely depending on the opacity, color and quality desired. In general, the higher the opacity requirement of the coating, the greater the TiO_2 content.

TiO_2 for plastics - We produce TiO_2 pigments that improve the optical and physical properties in plastics, including whiteness and opacity. TiO_2 is used to provide opacity in items such as containers and packaging materials, and vinyl products such as windows, door profiles and siding. TiO_2 also generally provides hiding power, neutral undertone, brightness and surface durability for housewares, appliances, toys, computer cases and food packages. TiO_2's high brightness along with its opacity, is used in some engineering plastics to help mask their undesirable natural color. TiO_2 is also used in masterbatch, which is a concentrate of TiO_2 and other additives and is one of the largest uses for TiO_2 in the plastics end-use market. In masterbatch, the TiO_2 is dispersed at high concentrations into a plastic resin and is then used by manufacturers of plastic containers, bottles, packaging and agricultural films.

TiO_2 for paper - Our TiO_2 is used in the production of several types of paper, including laminate (decorative) paper, filled paper and coated paper to provide whiteness, brightness, opacity and color stability. Although we sell our TiO_2 to all segments of the paper end-use market, our primary focus is on the TiO_2 grades used in paper laminates, where several layers of paper are laminated together using melamine resin under high temperature and pressure. The top layer of paper contains TiO_2 and plastic resin and is the layer that is printed with decorative patterns. Paper laminates are used to replace materials such as wood and tile for such applications as counter tops, furniture and wallboard. TiO_2 is beneficial in these applications because it assists in preventing the material from fading or changing color after prolonged exposure to sunlight and other weathering agents.

TiO_2 for other applications - We produce TiO_2 to improve the opacity and hiding power of printing inks. TiO_2 allows inks to achieve very high print quality while not interfering with the technical requirements of printing machinery, including low abrasion, high printing speed and high temperatures. Our TiO_2 is also used in textile applications where TiO_2 functions as an opacifying and delustering agent. In man-made fibers such as rayon and polyester, TiO_2 corrects an otherwise undesirable glossy and translucent appearance. Without the presence of TiO_2, these materials would be unsuitable for use in many textile applications.

We produce high purity sulfate process anatase TiO_2 used to provide opacity, whiteness and brightness in a variety of cosmetic and personal care products, such as skin cream, lipstick, eye shadow and toothpaste. Our TiO_2 is also found in food products, such as candy and confectionaries, and in pet foods where it is used to obtain uniformity of color and appearance. In pharmaceuticals, our TiO_2 is used commonly as a colorant in pill and capsule coatings as well as in liquid medicines to provide uniformity of color and appearance. Kronos® purified anatase grades meet the applicable requirements of the CTFA (Cosmetics, Toiletries and Fragrances Association), USP and BP (United States Pharmacopoeia and British Pharmacopoeia) and the FDA (United States Food and Drug Administration).

Our TiO_2 business is enhanced by the following three complementary businesses, which comprised approximately 10% of our net sales in 2013:

We own and operate two ilmenite mines in Norway pursuant to a governmental concession with an unlimited term. Ilmenite is a raw material used directly as a feedstock by some sulfate-process TiO_2 plants. We believe that we have a significant competitive advantage because our mines supply our feedstock requirements for all of our European sulfate-process plants. We also sell ilmenite ore to third-parties, some of whom are our competitors. The mines have estimated ilmenite reserves that are expected to last at least 50 years.

We manufacture and sell iron-based chemicals, which are co-products and processed co-products of the sulfate and chloride process TiO_2 pigment production. These co-product chemicals are marketed through our Ecochem division and are primarily used as treatment and conditioning agents for industrial effluents and municipal wastewater as well as in the manufacture of iron pigments, cement and agricultural products.

We manufacture and sell titanium oxychloride and titanyl sulfate, which are side-stream specialty products from the production of TiO_2. Titanium oxychloride is used in specialty applications in the formulation of pearlescent pigments, production of electroceramic capacitors for cell phones and other electronic devices. Titanyl sulfate productions are used in pearlescent pigments, natural gas pipe and other specialty applications.

Manufacturing, Operations and Properties

We produce TiO_2 in two crystalline forms: rutile and anatase. Rutile TiO_2 is manufactured using both a chloride production process and a sulfate production process, whereas anatase TiO_2 is only produced using a sulfate production process. Manufacturers of many end-use applications can use either form, especially during periods of tight supply for TiO_2. The chloride process is the preferred form for use in coatings and plastics, the two largest end-use markets. Due to environmental factors and customer considerations, the proportion of TiO_2 industry sales represented by chloride process pigments has increased relative to sulfate process pigments, and in 2013, chloride process production facilities represented approximately 47% of industry capacity. The sulfate process is preferred for use in selected paper products, ceramics, rubber tires, man-made fibers, food products and cosmetics. Once an intermediate TiO_2 pigment has been produced by either the chloride or sulfate process, it is "finished" into products with specific performance characteristics for particular end-use applications through proprietary processes involving various chemical surface treatments and intensive micronizing (milling).

Chloride process - The chloride process is a continuous process in which chlorine is used to extract rutile TiO_2. The chloride process produces less waste than the sulfate process because much of the chlorine is recycled and feedstock bearing higher titanium content is used. The chloride process also has lower energy requirements and is less labor-intensive than the sulfate process, although the chloride process requires a higher skilled labor force. The chloride process produces an intermediate base pigment with a wide range of properties.

Sulfate process - The Sulfate process is a batch process in which sulfuric acid is used to extract the TiO_2 from ilmenite or titanium slag. After separation from the impurities in the ore (mainly iron) the TiO_2 is precipitated and calcined to form an intermediate base pigment ready for sale or can be upgraded through finishing treatments.

We produced 474,000 metric tons of TiO_2 in 2013, up from the 469,000 metric tons we produced in 2012. Our production amounts include our share of the output produced by our TiO_2 manufacturing joint venture discussed below in "TiO_2 Manufacturing Joint Venture." Our average production capacity utilization rates were near full capacity in 2011, and approximately 85% and 86% of capacity in 2012 and 2013, respectively. Our production utilization rates in 2013 were impacted by a labor lockout at our Canadian production facility that began in June 2013 as discussed below in "Employees." We operated our Canadian plant at approximately 15% of the plant's capacity with non-union management employees during the lockout.

We operate four TiO_2 plants in Europe (one in each of Leverkusen, Germany; Nordenham, Germany; Langerbrugge, Belgium; and Fredrikstad, Norway). In North America, we have a TiO_2 plant in Varennes, Quebec, Canada and, through the manufacturing joint venture described below in "TiO_2 Manufacturing Joint Venture," a 50% interest in a TiO_2 plant in Lake Charles, Louisiana.

Our production capacity in 2013 was 550,000 metric tons, approximately three-fourths of which was from the chloride production process.

The following table presents the division of our expected 2014 manufacturing capacity by plant location and type of manufacturing process:

		% of capacity by TiO_2 manufacturing process			
Facility	Description	Chloride		Sulfate	
Leverkusen, Germany (1)	TiO_2 production, chloride and sulfate process, co-products	39	%	25	%
Nordenham, Germany	TiO_2 production, sulfate process, co-products	-		40	
Langerbrugge, Belgium	TiO_2 production, chloride process, co-products, titanium chemicals products	21		-	
Fredrikstad, Norway (2)	TiO_2 production, sulfate process, co-products	-		22	
Varennes, Canada	TiO_2 production, chloride and sulfate process, slurry facility, titanium chemicals products	21		13	
Lake Charles, LA, US (3)	TiO_2 production, chloride process	19		-	
Total		100	%	100	%

(1) The Leverkusen facility is located within an extensive manufacturing complex owned by Bayer AG. We own the Leverkusen facility, which represents about one-third of our current TiO_2 production capacity, but we lease the land under the facility from Bayer under a long-term agreement which expires in 2050. Lease payments are periodically negotiated with Bayer for periods of at least two years at a time. A majority-owned subsidiary of Bayer provides some raw materials including chlorine, auxiliary and operating materials, utilities and services necessary to operate the Leverkusen facility under separate supplies and services agreements.

(2) The Fredrikstad plant is located on public land and is leased until 2063.

(3) We operate the Lake Charles facility in a joint venture with Tioxide Americas LLC (Tioxide), a subsidiary of Huntsman Corporation and the amount indicated in the table above represents the share of TiO_2 produced by the joint venture to which we are entitled. See Note 7 to our Consolidated Financial Statements and "TiO_2 Manufacturing Joint Venture."

We own the land underlying all of our principle production facilities unless otherwise indicated in the table above.

Our production capacity has increased by approximately 17% over the past ten years due to debottlenecking programs, with only moderate capital expenditures. We believe that our annual attainable production capacity for 2014 is approximately 555,000 metric tons. While we expect our production capacity rate to be higher in 2014 as compared to 2013, we expect that we will operate at less-than-full production capacity in 2014, due principally to the ramp-up of operations at our Canadian facility following the end of the lockout in December 2013, when the terms of a new collective bargaining agreement were reached, as well as the implementation of certain productivity-enhancing capital improvement projects at other facilities which will result in longer-than-normal maintenance shutdowns in certain instances.

We also operate two ilmenite mines in Norway pursuant to a governmental concession with an unlimited term. In addition, we operate a rutile slurry manufacturing plant in Lake Charles, Louisiana, which converts dry pigment manufactured for us at the Lake Charles TiO_2 facility into a slurry form that is then shipped to customers.

We have various corporate and administrative offices located in the U.S., Germany, Norway, Canada and Belgium and various sales offices located in the U.S., Canada, Belgium, France, the Netherlands and the United Kingdom.

TiO_2 Manufacturing Joint Venture

Kronos Louisiana, Inc., one of our subsidiaries, and Tioxide, each own a 50% interest in a manufacturing joint venture, Louisiana Pigment Company, L.P., or LPC. LPC owns and operates a chloride-process TiO_2 plant located in Lake Charles, Louisiana. We and Huntsman share production from the plant equally pursuant to separate offtake agreements.

A supervisory committee directs the business and affairs of the joint venture, including production and output decisions. This committee is composed of four members, two of whom we appoint and two of whom Huntsman appoints. Two general managers manage the operations of the joint venture acting under the direction of the supervisory committee. We appoint one general manager and Huntsman appoints the other.

The joint venture is not consolidated in our financial statements, because we do not control it. We account for our interest in the joint venture by the equity method. The joint venture operates on a break-even basis and therefore we do not have any equity in earnings of the joint venture. We are required to purchase one half of the TiO_2 produced by the joint venture. All costs and capital expenditures are shared equally with Huntsman with the exception of raw material and packaging costs for the pigment grades produced. Our share of net costs is reported as cost of sales as the TiO_2 is sold. See Notes 7 and 16 to our Consolidated Financial Statements.

Raw Materials

The primary raw materials used in chloride process TiO_2 are titanium-containing feedstock (purchased natural rutile ore or slag), chlorine and coke. Chlorine is available from a number of suppliers, while petroleum coke is available from a limited number of suppliers. Titanium-containing feedstock suitable for use in the chloride process is available from a limited but increasing number of suppliers principally in Australia, South Africa, Canada, India and the United States. We purchase chloride process grade slag from Rio Tinto Iron and Titanium under a long-term supply contract that expires at the end of 2016 and from Tronox Mineral Sands (PTY) LTD under a supply contract that expires in December 2015. We purchase upgraded slag from Q.I.T. Fer et Titane Inc. (a subsidiary of Rio Tinto Iron and Titanium) under a long-term supply contract that expires at the end of 2015. We purchase natural rutile ore under contracts primarily from Iluka Resources, Limited and Sierra Rutile Limited (under a new supply contract entered into in January 2014) that expire in 2014. In the past we have been, and we expect that we will continue to be, successful in obtaining short-term and long-term extensions to these and other existing supply contracts prior to their expiration. We expect the raw materials purchased under these contracts, and contracts that we may enter into in the near term, will meet our chloride process feedstock requirements over the next several years.

The primary raw materials used in sulfate process TiO_2 are titanium-containing feedstock, primarily ilmenite or purchased sulfate grade slag and sulfuric acid. Sulfuric acid is available from a number of suppliers. Titanium-containing feedstock suitable for use in the sulfate process is available from a limited number of suppliers principally in Norway, Canada, Australia, India and South Africa. As one of the few vertically-integrated producers of sulfate process TiO_2, we operate two rock ilmenite mines in Norway, which provided all of the feedstock for our European sulfate process TiO_2 plants in 2013. We expect ilmenite production from our mines to meet our European sulfate process feedstock requirements for the foreseeable future. For our Canadian sulfate process plant, we also purchase sulfate grade slag primarily from Q.I.T. Fer et Titane Inc. (a subsidiary of Rio Tinto Iron and Titanium), under a supply contract that expires at the end of 2014. We expect the raw materials purchased under these contracts, and contracts that we may enter into in the near term, to meet our sulfate process feedstock requirements over the next several years.

Many of our raw material contracts contain fixed quantities we are required to purchase, or specify a range of quantities within which we are required to purchase. The pricing under these agreements is generally negotiated quarterly.

The following table summarizes our raw materials purchased or mined in 2013.

Production process/raw material	Raw materials procured or mined (In thousands of metric tons)
Chloride process plants -	
Purchased slag or rutile ore	390
Sulfate process plants:	
Ilmenite ore mined and used internally	310
Purchased slag	25

Sales and Marketing

Our marketing strategy is aimed at developing and maintaining strong customer relationships with new and existing accounts. Because TiO_2 represents a significant raw material cost for our customers, the purchasing decisions are often made by our customers' senior management. We work to maintain close relationships with the key decision makers, through in-depth and frequent in-person meetings. We endeavor to extend these commercial and technical relationships to multiple levels within our customers' organization using our direct sales force and technical service group to accomplish this objective. We believe this has helped build customer loyalty to Kronos and strengthened our competitive position. Close cooperation and strong customer relationships enable us to stay closely attuned to trends in our customers' businesses. Where appropriate, we work in conjunction with our customers to solve formulation or application problems by modifying specific product properties or developing new pigment grades. We also focus our sales and marketing efforts on those geographic and end-use market segments where we believe we can realize higher selling prices. This focus includes continuously reviewing and optimizing our customer and product portfolios.

Our marketing strategy is also aimed at working directly with customers to monitor the success of our products in their end-use applications, evaluate the need for improvements in product and process technology and identify opportunities to develop new product solutions for our customers. Our marketing staff closely coordinates with our sales force and technical specialists to ensure that the needs of our customers are met, and to help develop and commercialize new grades where appropriate.

We sell a majority of our products through our direct sales force operating from six sales offices in Europe and one sales office in North America. We also utilize sales agents and distributors who are authorized to sell our products in specific geographic areas. In Europe, our sales efforts are conducted primarily through our direct sales force and our sales agents. Our agents do not sell any TiO_2 products other than Kronos® brand products. In North America, our sales are made primarily through our direct sales force and supported by a network of distributors. In addition to our direct sales force and sales agents, many of our sales agents also act as distributors to service our smaller customers in all regions. We offer the same high level of customer and technical service to the customers who purchase our products through distributors as we offer to our larger customers serviced by our direct sales force.

We sell to a diverse customer base with only one customer representing 10% or more of Kronos' sales in 2013 (Behr Process Corporation – 10%). Kronos' largest ten customers accounted for approximately 34% of its sales in 2013.

Neither our business as a whole nor any of our principal product groups is seasonal to any significant extent. However, TiO_2 sales are generally higher in the second and third quarters of the year, due in part to the

increase in paint production in the spring to meet demand during the spring and summer painting seasons. With certain exceptions, we have historically operated our production facilities at near full capacity rates throughout the entire year, which among other things helps to minimize our per-unit production costs. As a result, we normally will build inventories during the first and fourth quarters of each year, in order to maximize our product availability during the higher demand periods normally experienced in the second and third quarters.

Competition

The TiO_2 industry is highly competitive. We compete primarily on the basis of price, product quality, technical service and the availability of high performance pigment grades. Since TiO_2 is not a traded commodity, its pricing is largely a product of negotiation between suppliers and their respective customers. Although certain TiO_2 grades are considered specialty pigments, the majority of our grades and substantially all of our production are considered commodity pigments with price and availability being the most significant competitive factors along with quality and customer service. During 2013, we had an estimated 9% share of worldwide TiO_2 sales volume, and based on sales volumes, we believe we are the leading seller of TiO_2 in several countries, including Germany.

Our principal competitors are E.I. du Pont de Nemours & Co., or Dupont; Millennium Inorganic Chemicals, Inc. (a subsidiary of National Titanium Dioxide Company Ltd.), or Cristal; Huntsman Corporation; Tronox Incorporated; and Sachtleben Chemie GmbH. The top six TiO_2 producers account for approximately 60% of the world's production capacity. In September 2013, Huntsman announced its intent to purchase Sachtleben's TiO_2 business as well as certain other assets from Sachtleben's parent company, which acquisition Huntsman has indicated it expects to be completed by June 2014. Concurrently, Huntsman also announced its intent to spin-off the consolidated TiO_2 business within two years of the acquisition. In October 2013, DuPont announced its intent to spin-off its TiO_2 operations into a separate publicly traded company by April 2015.

The following chart shows our estimate of worldwide production capacity in 2013:

Worldwide production capacity - 2013	
DuPont	18%
Cristal	11%
Kronos	9 %
Huntsman	9 %
Tronox	7 %
Sachtleben	5 %
Other	41%

DuPont has over one-half of total North American TiO_2 production capacity and is our principal North American competitor.

Over the past ten years, we and our competitors increased industry capacity through debottlenecking projects, which in part compensated for the shut down of various TiO_2 plants in France, the United States, the United Kingdom and China. In addition, in May 2011, DuPont announced a comprehensive plan to add approximately 350,000 metric tons of global capacity in the next three years. Although overall industry demand is expected to be generally higher in 2014 as compared to 2013 as a result of improving worldwide economic conditions, we do not expect any other significant efforts will be undertaken by us or our competitors to further increase capacity for the foreseeable future, other than through debottlenecking projects. If actual developments differ from our expectations, the TiO_2 industry's performance and that of our own could be unfavorably affected.

The TiO_2 industry is characterized by high barriers to entry consisting of high capital costs, proprietary technology and significant lead times (typically three to five years in our experience) required to construct new facilities or to expand existing capacity. In addition, we believe the suppliers of titanium-containing feedstock do not currently have the ability to supply the raw materials that would be required to operate any such new TiO_2 production capacity until they have invested in additional infrastructure required to expand their own production capacity, which we believe

will take a few years to complete. We believe it is unlikely any new TiO_2 plants will be constructed in Europe or North America in the foreseeable future.

Research and development

We employ scientists, chemists, process engineers and technicians who are engaged in research and development, process technology and quality assurance activities in Leverkusen, Germany. These individuals have the responsibility for improving our chloride and sulfate production processes, improving product quality and strengthening our competitive position by developing new applications. Our expenditures for these activities were approximately $20 million in 2011, $19 million in 2012 and $18 million in 2013. We expect to spend approximately $21 million on research and development in 2014.

We continually seek to improve the quality of our grades and have been successful at developing new grades for existing and new applications to meet the needs of our customers and increase product life cycles. Since 2008, we have added four new grades for pigments and other applications.

Patents, trademarks, trade secrets and other intellectual property rights

We have a comprehensive intellectual property protection strategy that includes obtaining, maintaining and enforcing our patents, primarily in the United States, Canada and Europe. We also protect our trademark and trade secret rights and have entered into license agreements with third parties concerning various intellectual property matters. We have also from time to time been involved in disputes over intellectual property.

Patents - We have obtained patents and have numerous patent applications pending that cover our products and the technology used in the manufacture of our products. Our patent strategy is important to us and our continuing business activities. In addition to maintaining our patent portfolio, we seek patent protection for our technical developments, principally in the United States, Canada and Europe. U.S. Patents are generally in effect for 20 years from the date of filing. Our U.S. patent portfolio includes patents having remaining terms ranging from one year to 18 years.

Trademarks and trade secrets - Our trademarks, including Kronos®, are covered by issued and/or pending registrations, including in Canada and the United States. We protect the trademarks that we use in connection with the products we manufacture and sell and have developed goodwill in connection with our long-term use of our trademarks. We conduct research activities in secret and we protect the confidentiality of our trade secrets through reasonable measures, including confidentiality agreements and security procedures. We rely upon unpatented proprietary knowledge and continuing technological innovation and other trade secrets to develop and maintain our competitive position. Our proprietary chloride production process is an important part of our technology and our business could be harmed if we fail to maintain confidentiality of our trade secrets used in this technology.

Employees

As of December 31, 2013, we employed the following number of people:

Europe	2,065
Canada	335
United States (1)	50
Total	2,450

(1) Excludes employees of our Louisiana joint venture

Certain employees at each of our production facilities are organized by labor unions. In Europe, our union employees are covered by master collective bargaining agreements for the chemical industry that are generally renewed annually. Unionized employees in our Canadian production facility were covered by a collective bargaining agreement that expired June 15, 2013. The union employees represented by the Confederation des Syndicat National

(CSN) rejected our revised global offer, and we declared a lockout of unionized employees upon the expiration of the existing contract. Effective the end of November 2013, we reached an agreement on the terms of a new collective bargaining agreement with the CSN and the unionized employees that expires in June 2018. The unionized employees began to return to work in December 2013 and production resumed in February 2014. Among other things, the new agreement provides for the reduction in our Canadian workforce and the freezing of the

defined benefit pension plan for hourly workers effective at the end of 2013 (which was replaced with a new defined contribution benefit plan.) These and other provisions of the new agreement are intended to reduce the operating costs of such facility going forward. At December 31, 2013, approximately 86% of our worldwide workforce is organized under collective bargaining agreements. It is possible that there could be future work stoppages or other labor disruptions that could materially and adversely affect our business, results of operations, financial position or liquidity.

Regulatory and environmental matters

Our operations and properties are governed by various environmental laws and regulations, which are complex, change frequently and have tended to become stricter over time. These environmental laws govern, among other things, the generation, storage, handling, use and transportation of hazardous materials; the emission and discharge of hazardous materials into the ground, air or water; and the health and safety of our employees. Certain of our operations are, or have been, engaged in the generation, storage, handling, manufacture or use of substances or compounds that may be considered toxic or hazardous within the meaning of applicable environmental laws and regulations. As with other companies engaged in similar businesses, certain of our past and current operations and products have the potential to cause environmental or other damage. We have implemented and continue to implement various policies and programs in an effort to minimize these risks. Our policy is to comply with applicable environmental laws and regulations at all our facilities and to strive to improve our environmental performance. It is possible that future developments, such as stricter requirements in environmental laws and enforcement policies, could adversely affect our operations, including production, handling, use, storage, transportation, sale or disposal of hazardous or toxic substances or require us to make capital and other expenditures to comply, and could adversely affect our consolidated financial position and results of operations or liquidity.

Our U.S. manufacturing operations are governed by federal, state and local environmental and worker health and safety laws and regulations. These include the Resource Conservation and Recovery Act, or RCRA, the Occupational Safety and Health Act, the Clean Air Act, the Clean Water Act, the Safe Drinking Water Act, the Toxic Substances Control Act and the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act, or CERCLA, as well as the state counterparts of these statutes. Some of these laws hold current or previous owners or operators of real property liable for the costs of cleaning up contamination, even if these owners or operators did not know of, and were not responsible for, such contamination. These laws also assess liability on any person who arranges for the disposal or treatment of hazardous substances, regardless of whether the affected site is owned or operated by such person. Although we have not incurred and do not currently anticipate any material liabilities in connection with such environmental laws, we may be required to make expenditures for environmental remediation in the future.

While the laws regulating operations of industrial facilities in Europe vary from country to country, a common regulatory framework is provided by the European Union, or the EU. Germany and Belgium are members of the EU and follow its initiatives. Norway is not a member but generally patterns its environmental regulatory actions after the EU.

At our sulfate plant facilities in Germany, we recycle spent sulfuric acid either through contracts with third parties or at our own facilities. In addition, at our German locations we have a contract with a third-party to treat certain sulfate-process effluents. At our Norwegian plant, we ship spent acid to a third party location where it is used as a neutralization agent. These contracts may be terminated by either party after giving three or four years advance notice, depending on the contract.

From time to time, our facilities may be subject to environmental regulatory enforcement under U.S. and non-U.S. statutes. Typically we establish compliance programs to resolve these matters. Occasionally, we may pay penalties. To date such penalties have not involved amounts having a material adverse effect on our consolidated financial position, results of operations or liquidity. We believe that all of our facilities are in substantial compliance

with applicable environmental laws.

Our capital expenditures related to ongoing environmental compliance, protection and improvement programs, including capital expenditures which are primarily focused on increased operating efficiency but also result in improved environmental protection such as lower emissions from our manufacturing facilities, were $24.8 million in 2013 and are currently expected to be approximately $14 million in 2014.

COMPONENT PRODUCTS SEGMENT—COMPX INTERNATIONAL INC.

Business Overview

Through our majority-controlled subsidiary, CompX, we are a leading manufacturer of security products used in recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries. We are also a leading manufacturer of stainless steel exhaust systems, gauges, and throttle controls primarily for recreational boats. Our products are principally designed for use in medium to high-end product applications, where design, quality and durability are valued by our customers. In December 2012, CompX sold its furniture components reporting unit which included two manufacturing facilities.

Manufacturing, Operations and Products

Security Products. Our security products reporting unit, with one manufacturing facility in South Carolina and one in Illinois shared with our marine components reporting unit, manufactures mechanical and electrical cabinet locks and other locking mechanisms used in a variety of applications including ignition systems, mailboxes, file cabinets, desk drawers, tool storage cabinets, vending and gaming machines, high security medical cabinetry, electrical circuit panels, storage compartments and gas station security. We believe we are a North American market leader in the manufacture and sale of cabinet locks and other locking mechanisms. These products include:

- disc tumbler locks which provide moderate security and generally represent the lowest cost lock to produce;
- pin tumbler locking mechanisms which are more costly to produce and are used in applications requiring higher levels of security, including KeSet® and System 64® (which each allow the user to change the keying on a single lock 64 times without removing the lock from its enclosure) and TuBar®; and
- our innovative CompX eLock® and StealthLock® electrical locks which provide stand alone or networked security and audit trail capability for drug storage and other valuables through the use of a proximity card, magnetic stripe or keypad credentials.

A substantial portion of our security products' sales consist of products with specialized adaptations to an individual customer's specifications, some of which are listed above. We also have a standardized product line suitable for many customers, which is offered through a North American distribution network to locksmith distributors and smaller original equipment manufacturers ("OEMs") via our STOCK LOCKS® distribution program.

Marine Components. Our marine components reporting unit, with a facility in Wisconsin and a facility shared with our security products reporting unit in Illinois, manufactures and distributes stainless steel exhaust components, gauges, throttle controls, hardware and accessories primarily for performance and ski/wakeboard boats. Our specialty Marine Component products are high precision components designed to operate within tight tolerances in the highly demanding marine environment. These products include:

- original equipment and aftermarket stainless steel exhaust headers, exhaust pipes, mufflers and other exhaust components;
- high performance gauges such as GPS speedometers and tachometers;
- mechanical and electronic controls and throttles;
- steering wheels and other billet aluminum accessories; and
- dash panels, LED lighting, wire harnesses and other accessories.

Our Component Products Segment operated three manufacturing facilities at December 31, 2013. For additional information, see also "Item 2 – Properties", including information regarding leased and distribution-only facilities.

Security Products	Marine Components
Mauldin, SC	Neenah, WI

Grayslake, IL Grayslake, IL

Raw Materials

Our primary raw materials are:

- zinc and brass (used in security products for the manufacture of locking mechanisms); and
- stainless steel (used primarily in marine components for the manufacture of exhaust headers and pipes and other components).

These raw materials are purchased from several suppliers, are readily available from numerous sources and accounted for approximately 11% of our total cost of sales for 2013.

We occasionally enter into short-term supply arrangements for our commodity related raw materials to mitigate the impact of future increases in raw material prices that are affected by commodity markets. These arrangements generally provide for stated unit prices based upon specified purchase volumes, which help us stabilize our commodity related raw material costs to a certain extent. Commodity related raw materials purchased outside of these arrangements are sometimes subject to unanticipated and sudden price increases. We generally seek to mitigate the impact of fluctuations in these raw material costs on our margins through improvements in production efficiencies or other operating cost reductions. In the event we are unable to offset raw material cost increases with other cost reductions, it may be difficult to recover those cost increases through increased product selling prices or raw material surcharges due to the competitive nature of the markets served by our products. Consequently, overall operating margins can be affected by commodity related raw material cost pressures. Commodity market prices are cyclical, reflecting overall economic trends, specific developments in consuming industries and speculative investor activities.

Patents and Trademarks

We hold a number of patents relating to our component products, certain of which are believed to be important to us and our continuing business activity. Patents generally have a term of 20 years, and our patents have remaining terms ranging less than 1 year to 18 years at December 31, 2013. Our major trademarks and brand names include:

Security Products	Marine Components
CompX® Security Products™	Custom Marine®
National Cabinet Lock®	Livorsi® Marine
Fort Lock®	Livorsi II® Marine
Fort®	CMI™ Industrial Mufflers
Timberline®	Custom Marine® Stainless Exhaust
Chicago Lock®	The #1 Choice in Performance Boating®
STOCK LOCKS®	Mega Rim®
KeSet®	Race Rim®
TuBar®	CompX Marine®
StealthLock®	Vantage View®
ACE®	GEN-X®
ACE® II	
CompX eLock®	
Lockview®	
System 64®	
SlamCAM®	
RegulatoR®	
CompXpress®	
GEM®	

Sales, Marketing and Distribution.

A majority of our component sales are direct to large OEM customers through our factory-based sales and marketing professionals supported by engineers working in concert with field salespeople and independent manufacturer's representatives. We select manufacturer's representatives based on special skills in certain markets or relationships with current or potential customers.

In addition to sales to large OEM customers, a significant portion of our security product sales are made through distributors. We have a significant North American market share of cabinet lock security product sales as a result of the locksmith distribution channel. We support our locksmith distributor sales with a line of standardized products used by the largest segments of the marketplace. These products are packaged and merchandised for easy availability and handling by distributors and end users.

In 2013, CompX's ten largest customers, all customers of our security products reporting unit, accounted for approximately 42% of its total sales. San Mateo Postal Data and Harley Davidson accounted for approximately 13% and 12%, respectively, of CompX's total sales for the year ended December 31, 2013. Overall, our customer base is diverse and the loss of any single customer would not in itself have a material adverse effect on our operations.

Competition

The markets in which we participate are highly competitive. We compete primarily on the basis of product design, including space utilization and aesthetic factors, product quality and durability, price, on-time delivery, service and technical support. We focus our efforts on the middle and high-end segments of the market, where product design, quality, durability and service are valued by the customer. Our security products reporting unit competes against a number of domestic and foreign manufacturers. Our marine components reporting unit competes with small domestic manufacturers and is minimally affected by foreign competitors.

Regulatory and Environmental Matters

Our operations are subject to federal, state and local laws and regulations relating to the use, storage, handling, generation, transportation, treatment, emission, discharge, disposal, remediation of and exposure to hazardous and non-hazardous substances, materials and wastes. Our operations also are subject to federal, state and local laws and regulations relating to worker health and safety. We believe we are in substantial compliance with all such laws and regulations. To date, the costs of maintaining compliance with such laws and regulations have not significantly impacted our results. We currently do not anticipate any significant costs or expenses relating to such matters; however, it is possible future laws and regulations may require us to incur significant additional expenditures.

Discontinued Operations

On December 28, 2012, CompX completed the sale of its furniture components reporting unit to a competitor of that segment for proceeds (net of expenses) of approximately $58.0 million in cash. We recognized a pre-tax gain of approximately $23.7 million on the disposal of these operations ($15.7 million, net of income taxes and noncontrolling interest) in the fourth quarter of 2012. See Note 3 to our Consolidated Financial Statements.

Employees

As of December 31, 2013, we employed 506 people, all in the United States. We believe our labor relations are good at all of our facilities.

WASTE MANAGEMENT SEGMENT—WASTE CONTROL SPECIALISTS LLC

Business Overview

Our Waste Management Segment was formed in 1995, and in early 1997 we completed construction of the initial phase of our waste management facility in West Texas. The original facility was initially designed for the processing, treatment, storage and disposal of certain hazardous and toxic wastes. We received the first wastes for disposal in 1997. Subsequently, we expanded our authorizations to include the processing, treatment and storage of LLRW and mixed LLRW and the disposal of certain types of exempt LLRW. In May 2008, the Texas Commission on Environmental Quality ("TCEQ") issued a byproduct materials disposal license to us. In January 2009, TCEQ issued a near-surface LLRW disposal license to us. This license was signed in September 2009.

We began construction of the byproduct facility infrastructure at our site in Andrews County, Texas in the third quarter of 2008, and this facility began disposal operations in October 2009. Construction of the Compact and Federal LLRW sites began in January 2011. The Compact LLRW site was fully certified and operational in April 2012. The Federal LLRW site was fully certified and operational in September 2012 and received its first waste for disposal in the latter part of the second quarter of 2013.

Facility, Operations and Services

Our Waste Management Segment operates one waste management facility located on a 1,338-acre site in West Texas. The facility is permitted for 6.5 million cubic yards of airspace landfill capacity for the disposal of Resource Conservation and Recovery Act ("RCRA"), Toxic Substance Control Act ("TSCA"), Byproduct and LLRW and mixed LLRW wastes. We also own approximately 13,500 acres of additional land surrounding the permitted site, a small portion of which is located in New Mexico, which is available for future expansion. We believe our facility has superior geological characteristics which make it an environmentally-desirable location for this type of waste disposal. The facility is located in a relatively remote and arid section of West Texas. The possibility of leakage into any underground water table is considered highly remote because the ground is composed of Triassic red bed clay and we do not believe there are any underground aquifers or other usable sources of water below the site based in part on extensive drilling by the oil and gas industry and our own test wells. Pursuant to the requirements of WCS' LLRW disposal license, the State of Texas, acting by and through the TCEQ, owns the real property for WCS' licensed "compact waste disposal facility" and leases it back to WCS; and WCS owns the real property for its licensed "federal waste disposal facility". The remainder of WCS' permitted site, and the Texas portion of the surrounding land described above, is subject to the sale-leaseback transaction WCS entered into with the County of Andrews, Texas, as discussed in Note 9 to our Consolidated Financial Statements.

The waste management facility operates under various licenses and permits, including in the following categories:

- LLRW Disposal. The LLRW disposal license allows WCS to dispose of Class A, B and C LLRW in the Compact LLRW disposal facility and the Federal LLRW disposal facility. The Federal LLRW disposal facility is for LLRW that is the responsibility of the U.S. government under applicable law, and is also permitted for disposal of mixed LLRW. The Compact LLRW disposal facility is licensed to accept LLRW that was either generated in Texas or Vermont, or has been approved for importation to Texas by the Texas Low-Level Radioactive Waste Disposal Compact Commission. Construction of the Compact and Federal LLRW disposal facilities began in January 2011. Both facilities were fully certified and operational in 2012. We accepted our first Compact waste disposal shipments in April 2012, but routine Compact disposal receipts did not occur until July 2012. We received a national disposal contract for our Federal LLRW disposal facility from the Department of Energy ("DOE") in April 2013, and we have regularly received small volumes of waste for disposal since the end of the second quarter of 2013.
- LLRW Treatment/Storage. In November 1997, the Texas Department of State Health Services ("TDSHS") issued a license to us for the treatment and storage, but not disposal, of LLRW and mixed LLRW. In June 2007, the TDSHS regulatory authority for this license was transferred to TCEQ. The current provisions of this license generally enable

us to accept such wastes for treatment and storage from U.S. commercial and federal generators, including the DOE and other governmental agencies. We accepted the first shipments of such wastes in 1998.

- RCRA/TSCA/Exempt. Our Waste Management Segment has permits from the TCEQ and the U.S. Environmental Protection Agency ("EPA") to accept hazardous and toxic wastes governed by RCRA and TSCA, for treatment, storage and/or disposal. In October 2005, our RCRA permit was renewed for a new ten-year period. Likewise in December 2011, our five-year TSCA authorization was renewed for a new five-year period. We have obtained additional authority to dispose of certain categories of LLRW, including naturally-occurring radioactive material ("NORM") and exempt-level materials (radioactive materials that do not exceed certain specified radioactive concentrations and are exempt from licensing). Materials disposed of under these permits and authorizations are disposed of in what we call the "RCRA landfill."
- Byproduct Disposal. In May 2008, TCEQ issued us a license for the disposal of byproduct material. Byproduct material includes uranium or thorium mill tailings as well as equipment, pipe and other materials used to handle and process the mill tailings. We completed construction of the byproduct facility infrastructure at our site in Andrews County, Texas in the third quarter of 2009, and this facility began disposal operations in October 2009. Byproduct materials are disposed of in what we call the "Byproduct landfill."

Our LLRW Treatment/Storage facility also serves as a staging and processing location for material that requires other forms of treatment prior to final disposal as mandated by the EPA or other regulatory bodies. Our 20,000 square foot treatment facility provides for waste treatment/stabilization, warehouse storage and treatment facilities for hazardous, toxic and mixed LLRW, drum to bulk, and bulk to drum materials handling and repackaging capabilities. Treatment operations involve processing wastes through one or more chemical or other treatment methods, depending upon the particular waste being disposed and regulatory and customer requirements. Chemical treatment uses chemical oxidation and reduction, chemical precipitation of heavy metals, hydrolysis and neutralization of acid and alkaline wastes, and results in the transformation of waste into inert materials through one or more of these chemical processes. Certain treatment processes involve technology which we may acquire, license or subcontract from third parties. Once treated and stabilized, waste currently is either: (i) placed in our landfills, (ii) stored onsite in drums or other specialized containers or (iii) shipped to third-party facilities for final disposition. Only waste that meets certain specified regulatory requirements can be disposed of in our landfills.

Sales

Our Waste Management Segment's target customers are industrial companies, including nuclear utilities, chemical, aerospace and electronics businesses and governmental agencies, including the DOE, which generate low-level radioactive, hazardous, mixed low-level radioactive and other wastes. We employ our own salespeople to market our services to potential customers. During 2013 we had sales to three customers that exceed 10% of our 2013 net sales; Tennessee Valley Authority (30%), Studsvik, Inc. (15%) and the DOE (10%). We have long-term disposal agreements with Tennessee Valley Authority and DOE.

Competition

The hazardous waste industry (other than LLRW and mixed LLRW) currently has excess industry capacity caused by a number of factors, including a relative decline in the number of environmental remediation projects generating hazardous wastes and efforts on the part of waste generators to reduce the volume of waste and/or manage waste onsite at their facilities. These factors have led to reduced demand and increased price pressure for non-radioactive hazardous waste management services. While we believe our broad range of permits for the treatment and storage of LLRW and mixed LLRW streams provide us certain competitive advantages, a key element of our long-term strategy is to provide "one-stop shopping" for hazardous, LLRW and mixed LLRW.

Competition within the hazardous waste industry is diverse and based primarily on facility location/proximity to customers, pricing and customer service. We expect price competition to continue to be intense for RCRA- and TSCA-related wastes. With respect to our low-level radioactive activities, our principal competitors are EnergySolutions, Inc., US Ecology Inc., and Perma-Fix Environmental Services, Inc. These competitors are well established and have significantly greater resources than we do, which could be important factors to our potential customers. We believe we may have certain competitive advantages, including our environmentally-desirable

location, broad level of local community support, a rail transportation network leading to our facility, our capability for future site expansion and the fact that the State of Texas takes title to the LLRW in our Compact disposal facility.

The LLRW industry has very limited competition because; (i) commercial low-level waste disposal facilities can only be licensed by the Nuclear Regulatory Commission ("NRC") or states that have an agreement with NRC to assume portions of its regulatory authority ("Agreement States"); (ii) the facilities must be designed, constructed and operated to meet strict safety standards and (iii) the operator of the facility must extensively characterize the site on which the facility is located and analyze how the facility will perform for thousands of years into the future. Prior to the receipt of our license, there were only three low-level waste disposal facilities in the United States. None of the three disposal facilities accept Class B or C LLRW from generators located in states which do not have a formal agreement with the state in which the disposal facility is located (the "Compact System" or the "Compact").

In the future, other commercial options may be available for the disposal of Class B/C LLRW. In addition, onsite storage by our customers is also an option and could be our biggest competition for disposal services. Eventually, waste in storage must be disposed of so the customers can decommission their facilities, so storage is believed to be a means to temporarily delay the timing of the eventual disposal.

Regulatory and Environmental Matters

While the waste management industry has benefited from increased governmental regulation, it has also become subject to extensive and evolving regulation by federal, state and local authorities. The regulatory process requires waste management businesses to obtain and retain numerous operating permits covering various aspects of their operations, any of which could be subject to revocation, modification or denial. Regulations also allow public participation in the permitting process. Individuals as well as companies may oppose the granting of permits. In addition, governmental policies and the exercise of broad discretion by regulators are subject to change. It is possible our ability to modify, obtain or retain permits on a timely basis could be impaired in the future. The loss of an individual permit or the failure to modify or obtain a permit could have a significant impact on our Waste Management Segment's future operating plans, financial condition, results of operations or liquidity, especially because we only operate one disposal site. For example, adverse decisions by governmental authorities on our permit applications could cause us to abandon projects, prematurely close our facility or restrict operations. See "Facility, Operations and Services" above for a discussion of some of our Waste Management Segment's permits. Our RCRA permit for the RCRA landfill expires in 2015 and TSCA authorization for the RCRA landfill expires in 2015. Our byproduct material disposal license expires in 2018 and our LLRW disposal license expires in 2024. Our RCRA permit for the Federal LLRW disposal facility expires in 2018, and the TSCA authorization for that facility is pending. Our LLRW treatment/storage license was combined into one license with our LLRW disposal license and now expires in 2024. Such permits, licenses and authorizations can be renewed subject to compliance with the requirements of the application process and approval by the TCEQ or the EPA, as applicable.

The Texas Low-Level Radioactive Waste Disposal Compact Commission ("Texas Compact Commission") is responsible for managing the disposal capacity of the Compact LLRW disposal facility. They do this by approving or denying export petitions from Texas Compact generators that wish to ship their waste to a different disposal site or approving or denying import petitions from out-of-compact generators that wish to ship their waste to the Compact LLRW disposal facility. The Texas Compact Commission has approved rules for the export and import of LLRW and began approving import agreements in 2012.

From time to time federal, state and local authorities have proposed or adopted other types of laws and regulations for the waste management industry, including laws and regulations restricting or banning the interstate or intrastate shipment of certain waste, changing the regulatory agency issuing a license, imposing higher taxes on out-of-state waste shipments compared to in-state shipments, reclassifying certain categories of hazardous waste as non-hazardous and regulating disposal facilities as public utilities. Certain states have issued regulations that attempt to prevent waste generated within a particular Compact from being sent to disposal sites outside that Compact. The U.S. Congress has also considered legislation that would enable or facilitate such bans, restrictions, taxes and regulations. Due to the complex nature of industry regulation, implementation of existing or future laws and regulations by different levels of government could be inconsistent and difficult to foresee. While we attempt to monitor and anticipate regulatory,

political and legal developments that affect the industry, we cannot assure you we will be able to do so. Nor can we predict the extent to which legislation or regulations that may be enacted, or any failure of legislation or regulations to be enacted, may affect our operations in the future.

The demand for certain hazardous and radioactive waste services we intend to provide is dependent in large part upon the existence and enforcement of federal, state and local environmental laws and regulations governing the discharge of those wastes into the environment. We and the industry as a whole could be adversely affected to the extent such laws or regulations are amended or repealed or their enforcement is lessened.

Because of the high degree of public awareness of environmental issues, companies in the waste management business may be, in the normal course of their business, subject to judicial and administrative proceedings. Governmental agencies may seek to impose fines or revoke, deny renewal of, or modify any applicable operating permits or licenses. In addition, private parties and special interest groups could bring actions against us alleging, among other things, a violation of operating permits or opposition or challenges to current or new license authorizations.

Employees

At December 31, 2013, WCS had 183 employees. We believe our labor relations are good.

OTHER

NL Industries, Inc.—At December 31, 2013, NL owned 87% of CompX and 30% of Kronos. NL also owns 100% of EWI RE, Inc., an insurance brokerage and risk management services company and also holds certain marketable securities and other investments. See Note 16 to our Consolidated Financial Statements for additional information.

Tremont LLC—Tremont is primarily a holding company through which we hold our 63% ownership interest in Basic Management, Inc. (“BMI”), which provides utility services to certain industrial customers, and owns real property in Henderson, Nevada, and our 77% ownership interest in The Landwell Company L.P. (“Landwell”), which is engaged in efforts to develop certain land holdings for commercial, industrial and residential purposes in Henderson, Nevada. Such 77% ownership interest in Landwell includes 27% we hold directly and 50% held by a subsidiary of BMI. We previously held a noncontrolling interest in both of these related companies. In December 2013 we acquired a controlling interest in each of these companies and they are included in our Consolidated Balance Sheet at December 31, 2013. See Note 3 to our Consolidated Financial Statements.

BMI operates an electricity distribution facility and a water distribution facility in Henderson, Nevada. At December 31, 2013 BMI and Landwell had 20 employees.

In addition, we also own real property related to certain of our former business units.

Business Strategy—We routinely compare our liquidity requirements and alternative uses of capital against the estimated future cash flows to be received from our subsidiaries and unconsolidated affiliates, and the estimated sales value of those businesses. As a result, we have in the past, and may in the future, seek to raise additional capital, refinance or restructure indebtedness, repurchase indebtedness in the market or otherwise, modify our dividend policy, consider the sale of an interest in our subsidiaries, business units, marketable securities or other assets, or take a combination of these or other steps, to increase liquidity, reduce indebtedness and fund future activities, which have in the past and may in the future involve related companies. From time to time, we and our related entities consider restructuring ownership interests among our subsidiaries and related companies. We expect to continue this activity in the future.

We and other entities that may be deemed to be controlled by or affiliated with Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons routinely evaluate acquisitions of interests in, or combinations with, companies, including related companies, we perceive to be undervalued in the marketplace. These companies may or may not be engaged in businesses related to our current businesses. In some instances we actively manage the businesses we acquire with a focus on maximizing return-on-investment through cost reductions, capital expenditures, improved operating

efficiencies, selective marketing to address market niches, disposition of marginal operations, use of leverage and redeployment of capital to more productive assets. In other instances, we have disposed of our interest in a company prior to gaining control. We intend to consider such activities in the future and may, in connection with such activities, consider issuing additional equity securities and increasing our indebtedness.

Website and Available Information—Our fiscal year ends December 31. We furnish our stockholders with annual reports containing audited financial statements. In addition, we file annual, quarterly and current reports, proxy and information statements and other information with the SEC. Certain of our consolidated subsidiaries (Kronos, NL and CompX) also file annual, quarterly and current reports, proxy and information statements and other information with the SEC. We also make our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments thereto, available free of charge through our website at www.valhi.net as soon as reasonably practical after they have been filed with the SEC. We also provide to anyone, without charge, copies of such documents upon written request. Requests should be directed to the attention of the Corporate Secretary at our address on the cover page of this Form 10-K.

Additional information, including our Audit Committee charter, our Code of Business Conduct and Ethics and our Corporate Governance Guidelines, can also be found on our website. Information contained on our website is not part of this Annual Report.

The general public may read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, NE, Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. We are an electronic filer. The SEC maintains an Internet website at www.sec.gov that contains reports, proxy and information statements and other information regarding issuers, such as us, that file electronically with the SEC.

ITEM 1A. RISK FACTORS

Listed below are certain risk factors associated with us and our businesses. In addition to the potential effect of these risk factors discussed below, any risk factor which could result in reduced earnings or increased operating losses, or reduced liquidity, could in turn adversely affect our ability to service our liabilities or pay dividends on our common stock or adversely affect the quoted market prices for our securities.

Our assets consist primarily of investments in our operating subsidiaries, and we are dependent upon distributions from our subsidiaries to service our liabilities.

The majority of our operating cash flows are generated by our operating subsidiaries, and our ability to service liabilities and to pay dividends on our common stock depends to a large extent upon the cash dividends or other distributions we receive from our subsidiaries and affiliates. Our subsidiaries and affiliates are separate and distinct legal entities and they have no obligation, contingent or otherwise, to pay such cash dividends or other distributions to us. In addition, the payment of dividends or other distributions from our subsidiaries could be subject to restrictions on, or taxation of, dividends or repatriation of earnings under applicable law, monetary transfer restrictions, currency exchange regulations in jurisdictions in which our subsidiaries operate or any other restrictions imposed by current or future agreements to which our subsidiaries may be a party, including debt instruments. Events beyond our control, including changes in general business and economic conditions, could adversely impact the ability of our subsidiaries to pay dividends or make other distributions to us. If our subsidiaries were to become unable to make sufficient cash dividends or other distributions to us, our ability to service our liabilities and to pay dividends on our common stock could be adversely affected.

In addition, a significant portion of our assets consist of ownership interests in our subsidiaries and affiliates. If we were required to liquidate any of such securities in order to generate funds to satisfy our liabilities, we may be required to sell such securities at a time or times at which we would not be able to realize what we believe to be the long-term value of such assets.

Demand for, and prices of, certain of our products are influenced by changing market conditions for our products, which may result in reduced earnings or in operating losses.

Approximately 90% of our Chemicals Segment's revenues are attributable to sales of TiO_2. Pricing within the global TiO_2 industry over the long term is cyclical and changes in economic conditions, especially in Western industrialized nations, can significantly impact our earnings and operating cash flows. Historically, the markets for many of our products have experienced alternating periods of increasing and decreasing demand. Relative changes in the selling prices for our products are one of the main factors that affect the level of our profitability. In periods of increasing demand, our selling prices and profit margins generally will tend to increase, while in periods of decreasing demand our selling prices and profit margins generally tend to decrease. In addition, pricing may affect customer inventory levels as customers may from time to time accelerate purchases of TiO_2 in advance of anticipated price increases or defer purchases of TiO_2 in advance of anticipated price decreases. Our ability to further increase capacity without additional investment in greenfield or brownfield capacity increases may be limited and as a result, our profitability may become even more dependent upon the selling prices of our products.

The demand for TiO_2 during a given year is also subject to annual seasonal fluctuations. TiO_2 sales are generally higher in the second and third quarters of the year. This is due in part to the increase in paint production in the spring to meet demand during the spring and summer painting season.

The TiO_2 industry is concentrated and highly competitive and we face price pressures in the markets in which we operate, which may result in reduced earnings or operating losses.

The global market in which we operate our Chemicals business is concentrated with the top six TiO_2 producers accounting for 60% of the world's production capacity and is highly competitive. Competition is based on a number of

factors, such as price, product quality and service. Some of our competitors may be able to drive down prices for our products if their costs are lower than our costs. In addition, some of our competitors' financial, technological and other resources may be greater than our resources and such competitors may be better able to withstand changes in market conditions. Our competitors may be able to respond more quickly than we can to new or emerging technologies and changes in customer requirements. Further, consolidation of our competitors or

customers may result in reduced demand for our products or make it more difficult for us to compete with our competitors. The occurrence of any of these events could result in reduced earnings or operating losses.

Higher costs or limited availability of our raw materials may reduce our earnings and decrease our liquidity. In addition, many of our raw material contracts contain fixed quantities we are required to purchase.

The number of sources for and availability of certain raw materials is specific to the particular geographical region in which a facility is located. For example, titanium-containing feedstocks suitable for use in our TiO_2 facilities are available from a limited number of suppliers around the world. Political and economic instability in the countries from which we purchase our raw material supplies could adversely affect their availability. If our worldwide vendors were unable to meet their contractual obligations and we were unable to obtain necessary raw materials, we could incur higher costs for raw materials or may be required to reduce production levels. We experienced significantly higher ore costs in 2012 which carried over into 2013. Although our purchase cost of third-party feedstock ore has and continues to moderate, such reductions did not begin to be significantly reflected in our cost of sales until the third quarter of 2013. We may also experience higher operating costs such as energy costs, which could affect our profitability. We may not always be able to increase our selling prices to offset the impact of any higher costs or reduced production levels, which could reduce our earnings and decrease our liquidity.

We have long-term supply contracts that provide for our TiO_2 feedstock requirements that currently expire through 2016. While we believe we will be able to renew these contracts, there can be no assurance we will be successful in renewing these contracts or in obtaining long-term extensions to these contracts prior to expiration. Our current agreements (including those entered into in January 2014) require us to purchase certain minimum quantities of feedstock with minimum purchase commitments aggregating approximately $820 million in years subsequent to December 31, 2013. In addition, we have other long-term supply and service contracts that provide for various raw materials and services. These agreements require us to purchase certain minimum quantities or services with minimum purchase commitments aggregating approximately $123 million at December 31, 2013. Our commitments under these contracts could adversely affect our financial results if we significantly reduce our production and were unable to modify the contractual commitments.

We could incur significant costs related to legal and environmental remediation matters.

NL formerly manufactured lead pigments for use in paint. NL and others have been named as defendants in various legal proceedings seeking damages for personal injury, property damage and governmental expenditures allegedly caused by the use of lead-based paints. These lawsuits seek recovery under a variety of theories, including public and private nuisance, negligent product design, negligent failure to warn, strict liability, breach of warranty, conspiracy/concert of action, aiding and abetting, enterprise liability, market share or risk contribution liability, intentional tort, fraud and misrepresentation, violations of state consumer protection statutes, supplier negligence and similar claims. The plaintiffs in these actions generally seek to impose on the defendants responsibility for lead paint abatement and health concerns associated with the use of lead-based paints, including damages for personal injury, contribution and/or indemnification for medical expenses, medical monitoring expenses and costs for educational programs. As with all legal proceedings, the outcome is uncertain. Any liability we might incur in the future could be material. See also Item 3—“Legal Proceedings—Lead pigment litigation - NL.”

Certain properties and facilities used in our former operations are the subject of litigation, administrative proceedings or investigations arising under various environmental laws. These proceedings seek cleanup costs, personal injury or property damages and/or damages for injury to natural resources. Some of these proceedings involve claims for substantial amounts. Environmental obligations are difficult to assess and estimate for numerous reasons, and we may incur costs for environmental remediation in the future in excess of amounts currently estimated. Any liability we might incur in the future could be material. See also Item 3—“Legal Proceedings—Environmental matters and litigation.”

Many of the markets in which our Component Products Segment operates are mature and highly competitive resulting in pricing pressure and the need to continuously reduce costs.

Many of the markets our Component Products Segment serves are highly competitive, with a number of competitors offering similar products. We focus our efforts on the middle and high-end segment of the market where we feel that we can compete due to the importance of product design, quality and durability to the customer. However, our ability to effectively compete is impacted by a number of factors. The occurrence of any of these factors could result in reduced earnings or operating losses.

- Competitors may be able to drive down prices for our products beyond our ability to adjust costs because their costs are lower than ours, especially products sourced from Asia.
- Competitors' financial, technological and other resources may be greater than our resources, which may enable them to more effectively withstand changes in market conditions.
- Competitors may be able to respond more quickly than we can to new or emerging technologies and changes in customer requirements.
- Consolidation of our competitors or customers in any of the markets in which we compete may result in reduced demand for our products.
- New competitors could emerge by modifying their existing production facilities to manufacture products that compete with our products.
- We may not be able to sustain a cost structure that enables us to be competitive.
- Customers may no longer value our product design, quality or durability over the lower cost products of our competitors.

Our development of innovative features for current products is critical to sustaining and growing our Component Product Segment's sales.

Historically, our Component Products Segment's ability to provide value-added custom engineered products that address requirements of technology and space utilization has been a key element of our success. We spend a significant amount of time and effort to refine, improve and adapt our existing products for new customers and applications. Since expenditures for these types of activities are not considered research and development expense under accounting principles generally accepted in the United States of America ("GAAP"), the amount of our research and development expenditures, which is not significant, is not indicative of the overall effort involved in the development of new product features. The introduction of new product features requires the coordination of the design, manufacturing and marketing of the new product features with current and potential customers. The ability to coordinate these activities with current and potential customers may be affected by factors beyond our control. While we will continue to emphasize the introduction of innovative new product features that target customer-specific opportunities, there can be no assurance that any new product features we introduce will achieve the same degree of success that we have achieved with our existing products. Introduction of new product features typically requires us to increase production volume on a timely basis while maintaining product quality. Manufacturers often encounter difficulties in increasing production volumes, including delays, quality control problems and shortages of qualified personnel or raw materials. As we attempt to introduce new product features in the future, there can be no assurance that we will be able to increase production volume without encountering these or other problems, which might negatively impact our financial condition or results of operations.

Failure to protect our intellectual property rights or claims by others that we infringe their intellectual property rights could substantially harm our business.

CompX relies on patent, trademark and trade secret laws in the United States and similar laws in other countries to establish and maintain intellectual property rights in our technology and designs. Despite these measures, any of our intellectual property rights could be challenged, invalidated, circumvented or misappropriated. Others may independently discover our trade secrets and proprietary information, and in such cases we could not assert any trade secret rights against such parties. Further, there can be no assurance that any of our pending trademark or patent

applications will be approved. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our intellectual property rights. In addition, the laws of certain countries do

not protect intellectual property rights to the same extent as the laws of the United States. Therefore, in certain jurisdictions, we may be unable to protect our technology and designs adequately against unauthorized third party use, which could adversely affect our competitive position.

Third parties may claim that we or our customers are infringing upon their intellectual property rights. Even if we believe that such claims are without merit, they can be time-consuming and costly to defend and distract our management's and technical staff's attention and resources. Claims of intellectual property infringement also might require us to redesign affected technology, enter into costly settlement or license agreements or pay costly damage awards, or face a temporary or permanent injunction prohibiting us from marketing or selling certain of our technology. If we cannot or do not license the infringed technology on reasonable pricing terms or at all, or substitute similar technology from another source, our business could be adversely impacted.

Our Waste Management Segment operates in a highly regulated industry, and third parties may from time to time seek to challenge our Waste Management Segment's licenses and permits. We may not be successful in obtaining new business to effectively operate our LLRW disposal facilities.

Our Waste Management Segment is required to comply with various federal, state and local regulations, as well as comply with the terms of our operating permits and licenses as they may be modified or amended. Failure to comply with any such regulation or permit requirements, or failure to obtain renewals, could adversely impact our operations. In addition, we must be successful in obtaining new business from our commercial and governmental customers in order to effectively operate our Compact and Federal LLRW disposal facilities. Third parties may from time to time seek to challenge our current operating licenses and permits. There is no assurance that we will be successful in obtaining such new business. Failure to obtain a sufficient amount of new business to effectively operate our LLRW disposal facilities could adversely impact our earnings and decrease our liquidity.

Our leverage may impair our financial condition or limit our ability to operate our businesses.

We have a significant amount of debt, primarily related to our loans from Contran Corporation (both Valhi and Kronos), our loans from Snake River Sugar Company and the WCS financing capital lease. As of December 31, 2013, our total consolidated debt was approximately $752.5 million (after giving effect to Kronos' new term loan entered into in February 2014, a portion of the proceeds of which were used to prepay its note payable to Contran, our consolidated debt would have been approximately $932.5 million). Our level of debt could have important consequences to our stockholders and creditors, including:

- making it more difficult for us to satisfy our obligations with respect to our liabilities;
- increasing our vulnerability to adverse general economic and industry conditions;
- requiring that a portion of our cash flows from operations be used for the payment of interest on our debt, which reduces our ability to use our cash flow to fund working capital, capital expenditures, dividends on our common stock, acquisitions or general corporate requirements;
- limiting the ability of our subsidiaries to pay dividends to us;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures, acquisitions or general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business and the industry in which we operate; and
- placing us at a competitive disadvantage relative to other less leveraged competitors.

In addition to our indebtedness, we are party to various lease and other agreements (including feedstock ore purchase contracts as previously described) pursuant to which, along with our indebtedness, we are committed to pay approximately $569 million in 2014. Such $569 million amount reflects the impact of Kronos' new term loan entered into in February 2014, and the application of the net proceeds of such term loan, as described in Note 9 to our Consolidated Financial Statements. Our ability to make payments on and refinance our debt and to fund planned capital expenditures depends on our future ability to generate cash flow. To some extent, this is subject to general

economic, financial, competitive, legislative, regulatory and other factors that are beyond our control. In addition, our ability to borrow funds under our subsidiaries' credit facilities in the future will, in some instances, depend in

part on these subsidiaries' ability to maintain specified financial ratios and satisfy certain financial covenants contained in the applicable credit agreement.

Our business may not generate cash flows from operating activities sufficient to enable us to pay our debts when they become due and to fund our other liquidity needs. As a result, we may need to refinance all or a portion of our debt before maturity. We may not be able to refinance any of our debt in a timely manner on favorable terms, if at all, in the current credit markets. Any inability to generate sufficient cash flows or to refinance our debt on favorable terms could have a material adverse effect on our financial condition.

Global climate change legislation could negatively impact our financial results or limit our ability to operate our businesses.

We operate production facilities in several countries, and we believe all of our worldwide production facilities are in substantial compliance with applicable environmental laws. In many of the countries in which we operate, legislation has been passed, or proposed legislation is being considered, to limit greenhouse gases through various means, including emissions permits and/or energy taxes. In several of our production facilities, we consume large amounts of energy, primarily electricity and natural gas. To date, the permit system in effect in the various countries in which we operate has not had a material adverse effect on our financial results. However, if greenhouse gas legislation were to be enacted in one or more countries, it could negatively impact our future results from operations through increased costs of production, particularly as it relates to our energy requirements. If such increased costs of production were to materialize, we may be unable to pass price increases onto our customers to compensate for increased production costs, which may decrease our liquidity, operating income and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

We along with our subsidiaries: Kronos, CompX, WCS and NL lease office space for our principal executive offices in Dallas, Texas. Our BMI and Landwell subsidiaries principal offices are in an owned building in Henderson, Nevada. A list of operating facilities for each of our subsidiaries is described in the applicable business sections of Item 1—"Business." We believe our facilities are generally adequate and suitable for their respective uses.

ITEM 3. LEGAL PROCEEDINGS

We are involved in various legal proceedings. In addition to information included below, certain information called for by this Item is included in Note 17 to our Consolidated Financial Statements, which is incorporated herein by reference.

Lead Pigment Litigation—NL

NL's former operations included the manufacture of lead pigments for use in paint and lead-based paint. NL, other former manufacturers of lead pigments for use in paint and lead-based paint (together, the "former pigment manufacturers"), and the Lead Industries Association (LIA), which discontinued business operations in 2002, have been named as defendants in various legal proceedings seeking damages for personal injury, property damage and governmental expenditures allegedly caused by the use of lead-based paints. Certain of these actions have been filed by or on behalf of states, counties, cities or their public housing authorities and school districts, and certain others

have been asserted as class actions. These lawsuits seek recovery under a variety of theories, including public and private nuisance, negligent product design, negligent failure to warn, strict liability, breach of warranty, conspiracy/concert of action, aiding and abetting, enterprise liability, market share or risk contribution liability, intentional tort, fraud and misrepresentation, violations of state consumer protection statutes, supplier negligence and similar claims.

The plaintiffs in these actions generally seek to impose on the defendants responsibility for lead paint abatement and health concerns associated with the use of lead-based paints, including damages for personal injury, contribution and/or indemnification for medical expenses, medical monitoring expenses and costs for educational programs. To the extent the plaintiffs seek compensatory or punitive damages in these actions, such damages are generally unspecified. In some cases, the damages are unspecified pursuant to the requirements of applicable state law. A number of cases are inactive or have been dismissed or withdrawn. Most of the remaining cases are in various pre-trial stages. Some are on appeal following dismissal or summary judgment rulings in favor of either the defendants or the plaintiffs. In addition, various other cases (in which we are not a defendant) are pending that seek recovery for injury allegedly caused by lead pigment and lead-based paint. Although we are not a defendant in these cases, the outcome of these cases may have an impact on cases that might be filed against us in the future.

We believe that these actions are without merit, and we intend to continue to deny all allegations of wrongdoing and liability and to defend against all actions vigorously. We do not believe it is probable that we have incurred any liability with respect to all of the lead pigment litigation cases to which we are a party, and liability to us that may result, if any, in this regard cannot be reasonably estimated, because:

- we have never settled any of the market share, risk contribution, intentional tort, fraud, nuisance, supplier negligence, breach of warranty, conspiracy, misrepresentation, aiding and abetting, enterprise liability, or statutory cases,
- no final, non-appealable adverse verdicts have ever been entered against us, and
- we have never ultimately been found liable with respect to any such litigation matters, including over 100 cases over a twenty-year period for which we were previously a party and for which we have been dismissed without any finding of liability.

Accordingly, we have not accrued any amounts for any of the pending lead pigment and lead-based paint litigation cases. In addition, we have determined that liability to us which may result, if any, cannot be reasonably estimated because there is no prior history of a loss of this nature on which an estimate could be made and there is no substantive information available upon which an estimate could be based.

In April 2000, we were served with a complaint in County of Santa Clara v. Atlantic Richfield Company, et al. (Superior Court of the State of California, County of Santa Clara, Case No. 1-00-CV-788657) brought by a number of California government entities against the former pigment manufacturers, the LIA and certain paint manufacturers. The County of Santa Clara sought to recover compensatory damages for funds the plaintiffs have expended or will in the future expend for medical treatment, educational expenses, abatement or other costs due to exposure to, or potential exposure to, lead paint, disgorgement of profit, and punitive damages. In July 2003, the trial judge granted defendants' motion to dismiss all remaining claims. Plaintiffs appealed and the intermediate appellate court reinstated public nuisance, negligence, strict liability, and fraud claims in March 2006. A fourth amended complaint was filed in March 2011 on behalf of The People of California by the County Attorneys of Alameda, Ventura, Solano, San Mateo, Los Angeles and Santa Clara, and the City Attorneys of San Francisco, San Diego and Oakland. That complaint alleged that the presence of lead paint created a public nuisance in each of the prosecuting attorney jurisdictions and seeks its abatement. In July and August 2013, the case was tried. In January 2014, the Judge issued a judgment finding us, The Sherwin Williams Company and ConAgra jointly and severally liable for the abatement of lead paint in pre-1980 homes, and ordered the defendants to pay an aggregate $1.15 billion to the State of California to fund such abatement. NL believes that this judgment is inconsistent with California law and is unsupported by the evidence, and we will appeal in the first quarter of 2014. In February 2014, we filed a motion for a new trial.

In June 2000, a complaint was filed in Illinois state court, Lewis, et al. v. Lead Industries Association, et al (Circuit Court of Cook County, Illinois, County Department, Chancery Division, Case No. 00CH09800.) Plaintiffs seek to represent two classes, one consisting of minors between the ages of six months and six years who resided in housing in Illinois built before 1978, and another consisting of individuals between the ages of six and twenty years who lived in Illinois housing built before 1978 when they were between the ages of six months and six years and who had blood lead levels of 10 micrograms/deciliter or more. The complaint seeks damages jointly and severally from the former

pigment manufacturers and the LIA to establish a medical screening fund for the first class to determine blood lead levels, a medical monitoring fund for the second class to detect the onset of latent diseases and a fund for a public education campaign. In April 2008, the trial court judge certified a class of children whose blood lead levels were screened venously between August 1995 and February 2008 and who had incurred

expenses associated with such screening. In March 2012, the trial court judge decertified the class. In June 2012, the trial court judge granted plaintiffs the right to appeal his decertification order, and in August 2012 the appellate court granted plaintiffs permission to appeal. In March 2013, the appellate court agreed with the trial court's rationale regarding legislative requirements to screen children's blood lead levels and remanded the case for further proceedings in the trial court. In July 2013, plaintiffs moved to vacate the decertification. In October 2013, the judge denied plaintiffs' motion to vacate the decertification of the class. The next hearing is scheduled for March 2014.

Between January 2007 and May 2011, we were served with nine complaints filed in the Circuit Court in Milwaukee County, Wisconsin or in the United District Court, Eastern District of Wisconsin. The plaintiffs are 173 minor children who allege injuries purportedly caused by lead on the surfaces of the homes in which they resided. Plaintiffs seek compensatory and punitive damages. The defendants in these cases include us, American Cyanamid Company, Armstrong Containers, Inc., E.I. Du Pont de Nemours & Company, Atlantic Richfield Company and The Sherwin-Williams Company. Property owners are also defendants in each of the cases. Two of the cases remain pending in State Court (Clark and Williams); four have been removed to Federal court (Burton, Owens, B. Stokes, and Gibson); and three were filed in Federal Court (Sifuentes, Allen and Valoe). In November 2010, Gibson was dismissed as to all defendants in a ruling holding that application of Wisconsin's risk contribution doctrine deprived defendants of due process. In December 2010, the plaintiff appealed to the U.S. 7th Circuit Court of Appeals. In light of the Gibson ruling and appeal, all other cases were stayed pending action by the 7th Circuit. In July 2013, we notified the 7th Circuit in Gibson of the new 2013 Wisconsin statute making the Collins DES criteria for risk contribution apply to all cases asserting risk contribution. No decision has yet been issued by the 7th Circuit Court. In July 2013, we filed motions in Clark and Williams (both in State Court) to lift the stays and dismiss the cases based on the new 2013 Wisconsin statute. In July 2013, the plaintiff in Burton (in Federal Court) moved to amend his complaint to add a request for declaratory judgment that the new Wisconsin statute is unconstitutional and NL responded asking for the stay to remain in place. In December 2013, Williams and Clark were consolidated for the sole purpose of ruling on the motions to dismiss. Williams is stayed awaiting a decision in Clark.

In addition to the foregoing litigation, various legislation and administrative regulations have, from time to time, been proposed that seek to (a) impose various obligations on present and former manufacturers of lead pigment and lead-based paint with respect to asserted health concerns associated with the use of such products and (b) effectively overturn court decisions in which we and other pigment manufacturers have been successful. Examples of such proposed legislation include bills which would permit civil liability for damages on the basis of market share, rather than requiring plaintiffs to prove that the defendant's product caused the alleged damage, and bills which would revive actions barred by the statute of limitations. While no legislation or regulations have been enacted to date that are expected to have a material adverse effect on our consolidated financial position, results of operations or liquidity, the imposition of market share liability or other legislation could have such an effect.

New cases may continue to be filed against NL. We cannot assure you that we will not incur liability in the future in respect of any of the pending or possible litigation in view of the inherent uncertainties involved in court and jury rulings. In the future, if new information regarding such matters becomes available to us (such as a final, non-appealable adverse verdict against us or otherwise ultimately being found liable with respect to such matters), at that time we would consider such information in evaluating any remaining cases then-pending against us as to whether it might then have become probable we have incurred liability with respect to these matters, and whether such liability, if any, could have become reasonably estimable. The resolution of any of these cases could result in the recognition of a loss contingency accrual that could have a material adverse impact on our net income for the interim or annual period during which such liability is recognized and a material adverse impact on our consolidated financial condition and liquidity.

Environmental Matters and Litigation

Our operations are governed by various environmental laws and regulations. Certain of our businesses are and have been engaged in the handling, manufacture or use of substances or compounds that may be considered toxic or

hazardous within the meaning of applicable environmental laws and regulations. As with other companies engaged in similar businesses, certain of our past and current operations and products have the potential to cause environmental or other damage. We have implemented and continue to implement various policies and programs in an effort to minimize these risks. Our policy is to maintain compliance with applicable environmental laws and regulations at all of our plants and to strive to improve environmental performance. From time to time, we may be subject to environmental regulatory enforcement under U.S. and non-U.S. statutes, the resolution of which typically

involves the establishment of compliance programs. It is possible that future developments, such as stricter requirements of environmental laws and enforcement policies, could adversely affect our production, handling, use, storage, transportation, sale or disposal of such substances. We believe that all of our facilities are in substantial compliance with applicable environmental laws.

Certain properties and facilities used in NL's former operations, including divested primary and secondary lead smelters and former mining locations, are the subject of civil litigation, administrative proceedings or investigations arising under federal and state environmental laws and common law. Additionally, in connection with past operating practices, NL is currently involved as a defendant, potentially responsible party (PRP) or both, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act (CERCLA), and similar state laws in various governmental and private actions associated with waste disposal sites, mining locations, and facilities that we or our predecessors, our subsidiaries or their predecessors currently or previously owned, operated or used, certain of which are on the United States Environmental Protection Agency's (EPA) Superfund National Priorities List or similar state lists. These proceedings seek cleanup costs, damages for personal injury or property damage and/or damages for injury to natural resources. Certain of these proceedings involve claims for substantial amounts. Although NL may be jointly and severally liable for these costs, in most cases NL is only one of a number of PRPs who may also be jointly and severally liable, and among whom costs may be shared or allocated. In addition, NL is also a party to a number of personal injury lawsuits filed in various jurisdictions alleging claims related to environmental conditions alleged to have resulted from our operations.

Obligations associated with environmental remediation and related matters are difficult to assess and estimate for numerous reasons including the:

- complexity and differing interpretations of governmental regulations;
- number of PRPs and their ability or willingness to fund such allocation of costs;
- financial capabilities of the PRPs and the allocation of costs among them,;
- solvency of other PRPs;
- multiplicity of possible solutions;
- number of years of investigatory, remedial and monitoring activity required;
- uncertainty over the extent, if any, to which our former operations might have contributed to the conditions allegedly giving rise to such personal injury, property damage, natural resource and related claims; and
- number of years between former operations and notice of claims and lack of information and documents about the former operations.

In addition, the imposition of more stringent standards or requirements under environmental laws or regulations, new developments or changes regarding site cleanup costs or the allocation of costs among PRPs, solvency of other PRPs, the results of future testing and analysis undertaken with respect to certain sites or a determination that we are potentially responsible for the release of hazardous substances at other sites, could cause our expenditures to exceed our current estimates. We cannot assure you that actual costs will not exceed accrued amounts or the upper end of the range for sites for which estimates have been made, and we cannot assure you that costs will not be incurred for sites where no estimates presently can be made. Further, additional environmental and related matters may arise in the future. If we were to incur any future liability, this could have a material adverse effect on our consolidated financial statements, results of operations and liquidity.

We record liabilities related to environmental remediation and related matters when estimated future expenditures are probable and reasonably estimable. We adjust such accruals as further information becomes available to us or as circumstances change. Unless the amounts and timing of such estimated future expenditures are fixed and reasonably determinable, we generally do not discount estimated future expenditures to their present value due to the uncertainty of the timing of the payout. We recognize recoveries of costs from other parties, if any, as assets when their receipt is deemed probable. At December 31, 2012, we have not recognized any receivables for recoveries. Recoveries

recognized at December 31, 2013 are not significant.

We do not know and cannot estimate the exact time frame over which we will make payments for our accrued environmental and related costs. The timing of payments depends upon a number of factors, including but not limited to the timing of the actual remediation process; which in turn depends on factors outside of our control. At each balance sheet date, we estimate the amount of our accrued environmental and related costs which we expect to pay within the next twelve months, and we classify this estimate as a current liability. We classify the remaining accrued environmental costs as a noncurrent liability.

On a quarterly basis, we evaluate the potential range of our liability for environmental remediation and related costs at sites where we have been named as a PRP or defendant, including sites for which our wholly-owned environmental management subsidiary, NL Environmental Management Services, Inc., (EMS), has contractually assumed our obligations. At December 31, 2013, NL had accrued approximately $114 million related to approximately 45 sites associated with remediation and related matters that we believe are at the present time and/or in their current phase reasonably estimable. The upper end of the range of reasonably possible costs to us for remediation and related matters for which we believe it is possible to estimate costs is approximately $154 million, including the amount currently accrued. Other than as indicated above, these accruals have not been discounted to present value.

We believe that it is not possible to estimate the range of costs for certain sites. At December 31, 2013, there were approximately 5 sites for which NL is not currently able to estimate a range of costs. For these sites, generally the investigation is in the early stages, and NL is unable to determine whether or not we actually had any association with the site, the nature of its responsibility, if any, for the contamination at the site and the extent of contamination at and cost to remediate the site. The timing and availability of information on these sites is dependent on events outside of our control, such as when the party alleging liability provides information to us. At certain of these previously inactive sites, NL has received general and special notices of liability from the EPA and/or state agencies alleging that we, sometimes with other PRPs, are liable for past and future costs of remediating environmental contamination allegedly caused by former operations. These notifications may assert that NL, along with any other alleged PRPs, are liable for past and/or future clean-up costs. As further information becomes available to us for any of these sites which would allow us to estimate a range of costs, we would at that time adjust our accruals. Any such adjustment could result in the recognition of an accrual that would have a material effect on our consolidated financial statements, results of operations and liquidity.

In June 2006, we and several other PRPs received a Unilateral Administrative Order (UAO) from the EPA regarding a formerly-owned mine and milling facility located in Park Hills, Missouri. The Doe Run Company is the current owner of the site, which was purchased by a predecessor of Doe Run from us in approximately 1936. Doe Run is also named in the Order. In April 2008, the parties signed a definitive cost sharing agreement for sharing of the costs anticipated in connection with the order and in May 2008, the parties began work at the site as required by the UAO and in accordance with the cost sharing agreement. In the fourth quarter of 2010, NL reached its capped payment obligation under the cost sharing agreement with Doe Run. In the fourth quarter of 2013, Doe Run completed the remainder of the construction work. A Removal Action Report and Post-Removal Site Control plan will be submitted to the EPA in the first half of 2014.

In June 2008, we received a Directive and Notice to Insurers from the New Jersey Department of Environmental Protection (NJDEP) regarding the Margaret's Creek site in Old Bridge Township, New Jersey. NJDEP alleged that a waste hauler transported waste from one of our former facilities for disposal at the site in the early 1970s. NJDEP referred the site to the EPA, and in November 2009, the EPA added the site to the National Priorities List under the name "Raritan Bay Slag Site." In 2012, EPA notified NL of its potential liability at this site. In May 2013, EPA issued its Record of Decision for the site. In June 2013, NL filed a contribution suit under CERCLA and the New Jersey Spill Act titled NL Industries, Inc. v. Old Bridge Township, et al. (United States District Court for the District of New Jersey, Civil Action No. 3:13-cv-03493-MAS-TJB) against the current owner, Old Bridge Township, and several federal and state entities NL alleges designed and operated the site and who have significant potential liability as compared to NL which is alleged to have been a potential source of material placed at the site by others. NL's suit also names certain former NL customers of the former NL facility alleged to be the source of some of the materials. In

January 2014, EPA issued a UAO to NL for clean-up of the site based on the EPA's preferred remedy set forth in the Record of Decision. NL is in discussions with EPA about NL's performance of a defined amount of the work at the site and is otherwise taking actions necessary to respond to the UAO. If these discussions and actions are unsuccessful, NL will defend vigorously against all claims while continuing to seek contributions from other PRPs.

In September 2008, we received a Special Notice letter from the EPA for liability associated with the Tar Creek Superfund site in Ottawa County (Tar Creek) and a demand for related past and future costs. We responded with a good-faith offer to pay certain of the past costs and to complete limited work in the areas in which we operated. We are involved in an ongoing dialogue with the EPA regarding a potential settlement. In October 2008, we received a claim from the State of Oklahoma for past, future and relocation costs in connection with the site. The state continues to monitor for a potential settlement between the EPA and us and may subsequently attempt to pursue a separate settlement with us.

In June 2009, we were served with a complaint in Consolidation Coal Company v. 3M Company, et al. (United States District Court, Eastern District of North Carolina, Civil Action No. 5:09-CV-00191-FL). The complaint seeks to recover against NL and roughly 170 other defendants under CERCLA for past and future response costs. The plaintiffs allege that NL's former Albany operation allegedly sent three PCB-containing transformers to the Ward Transformer Superfund Site. In December 2012, NL received a notice of potential responsibility for past costs from the EPA. We have denied liability and will defend vigorously against all claims.

In August 2009, we were served with a complaint in Raritan Baykeeper, Inc. d/b/a NY/NJ Baykeeper et al. v. NL Industries, Inc. et al. (United States District Court, District of New Jersey, Case No. 3:09-cv-04117). This is a citizen's suit filed by two local environmental groups pursuant to the Resource Conservation and Recovery Act and the Clean Water Act against NL, current owners, developers and state and local government entities. The complaint alleges that hazardous substances were and continue to be discharged from our former Sayreville, New Jersey property into the sediments of the adjacent Raritan River. The former Sayreville site is currently being remediated by owner/developer parties under the oversight of the NJDEP. The plaintiffs seek a declaratory judgment, injunctive relief, imposition of civil penalties and an award of costs. We have denied liability and will defend vigorously against all claims

In June 2011, we were served in ASARCO LLC v. NL Industries, Inc., et al. (United States District Court, Western District of Missouri, Case No. 4:11-cv-00138-DGK). The plaintiff brought this CERCLA contribution action against several defendants to recover a portion of the amount it paid in settlement with the U.S. Government during its Chapter 11 bankruptcy in relation to the Tar Creek site, the Cherokee County Superfund Site in southeast Kansas, the Oronogo-Duenweg Lead Mining Belt Superfund Site in Jasper County, Missouri and the Newton County Mine Tailing Site in Newton County, Missouri. We have denied liability and will defend vigorously against all of the claims. In the second quarter of 2012, NL filed a motion to stay the case. In the first quarter of 2013, NL's motion was granted and the court entered an indefinite stay.

In September 2011, we were served in ASARCO LLC v. NL Industries, Inc., et al. (United States District Court, Eastern District of Missouri, Case No. 4:11-cv-00864). The plaintiff brought this CERCLA contribution action against several defendants to recover a portion of the amount it paid in settlement with the U.S. Government during its Chapter 11 bankruptcy in relation to the Southeast Missouri Mining District. We have denied liability and will defend vigorously against all of the claims.

In July 2012, we were served in EPEC Polymers, Inc., v. NL Industries, Inc., (United States District Court for the District of New Jersey, Case 3:12-cv-03842-PGS-TJB). The plaintiff, a landowner of property located across the Raritan River from our former Sayreville, New Jersey operation, claims that contaminants from NL's former Sayreville operation came to be located on its land. The complaint seeks compensatory and punitive damages and alleges, among other things, trespass, private nuisance, negligence, strict liability, and claims under CERCLA and the New Jersey Spill Act. We have denied liability and will defend vigorously against all of the claims.

In March 2013, NL received Special Notice from EPA for Operable Unit 1 (residential area) at the Big River Mine Tailings Superfund Site in St. Francois County, Missouri. The site encompasses approximately eight former mine and mill areas, only one of which is associated with former NL operations, as well as adjacent residential areas. NL initiated a dialog with EPA regarding a potential settlement for this operable unit.

In September 2013, EPA issued to NL and 34 other PRPs general notice of potential liability and a demand for payment of past costs and performance of a Remedial Design for the Gowanus Canal Superfund Site in Brooklyn, New York. We intend to deny liability and will defend vigorously against all of the claims.

See also Item 1 “Regulatory and Environmental Matters.”

Other — We have also accrued approximately $9.0 million at December 31, 2013 for other environmental cleanup matters. This accrual is near the upper end of the range of our estimate of reasonably possible costs for such matters.

Other Litigation

In addition to the matters described above, we and our affiliates are also involved in various other environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to present and former businesses. In certain cases, we have insurance coverage for these items, although we do not expect additional material insurance coverage for environmental claims.

We currently believe that the disposition of all claims and disputes, individually or in the aggregate, should not have a material adverse effect on our consolidated financial position, results of operations or liquidity beyond the accruals already provided.

Insurance Coverage Claims

NL is involved in certain legal proceedings with a number of its former insurance carriers regarding the nature and extent of the carriers' obligations to NL under insurance policies with respect to certain lead pigment and asbestos lawsuits. The issue of whether insurance coverage for defense costs or indemnity or both will be found to exist for our lead pigment and asbestos litigation depends upon a variety of factors and we cannot assure you that such insurance coverage will be available.

NL has agreements with four former insurance carriers pursuant to which the carriers reimburse it for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of its future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. While NL continues to seek additional insurance recoveries, we do not know if it will be successful in obtaining reimbursement for either defense costs or indemnity. Accordingly, we recognize insurance recoveries in income only when receipt of the recovery is probable and we are able to reasonably estimate the amount of the recovery. See Note 17 to our Consolidated Financial Statements.

NL has settled insurance coverage claims concerning environmental claims with certain of its principal former carriers. We do not expect further material settlements relating to environmental remediation coverage.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OR EQUITY SECURITIES

Common Stock and Dividends—Our common stock is listed and traded on the New York Stock Exchange (symbol: VHI). As of March 7, 2014, there were approximately 2,100 holders of record of our common stock. The following table sets forth the high and low closing per share sales prices for our common stock and dividends for the periods indicated. On March 7, 2014 the closing price of our common stock was $10.75.

	High	Low	Cash dividends paid
Year ended December 31, 2012			
First Quarter	$ 20.67	$ 17.30	$ .042
Second Quarter	18.02	12.49	.050
Third Quarter	13.42	10.95	.050
Fourth Quarter	12.83	11.52	.050
Year ended December 31, 2013			
First Quarter	$ 16.89	$ 12.74	$ .050
Second Quarter	16.60	12.68	.050
Third Quarter	20.71	13.25	.050
Fourth Quarter	19.86	14.28	.050
First Quarter 2014 through March 8	$ 16.04	$ 10.75	$ —

We paid regular quarterly cash dividends of $.042 per share during the first quarter of 2012. During the second quarter of 2012 our board of directors voted to increase the regular quarterly dividend to $.05, which rate was paid in the second, third and fourth quarters of 2012 and in each quarter of 2013. In February 2014, our board of directors declared a first quarter 2014 dividend of $.05 per share, to be paid on March 27, 2014 to stockholders of record as of March 11, 2014. However, declaration and payment of future dividends, and the amount thereof, is discretionary and is dependent upon our results of operations, financial condition, cash requirements for our businesses, contractual requirements and restrictions and other factors deemed relevant by our Board of Directors. The amount and timing of past dividends is not necessarily indicative of the amount or timing of any future dividends which we might pay.

Performance Graph—Set forth below is a line graph comparing the yearly change in our cumulative total stockholder return on our common stock against the cumulative total return of the S&P 500 Composite Stock Price Index and the S&P 500 Industrial Conglomerates Index for the period from December 31, 2008 through December 31, 2013. The graph shows the value at December 31 of each year assuming an original investment of 100 at December 31, 2008, and assumes the reinvestment of our regular quarterly dividends in shares of our stock.

	December 31,					
	2008	2009	2010	2011	2012	2013
Valhi common stock	$100	$136	$220	$608	$382	$544
S&P 500 Composite Stock Price Index	100	126	146	149	172	228
S&P 500 Industrial Conglomerates Index	100	110	131	132	158	222

The information contained in the performance graph shall not be deemed “soliciting material” or “filed” with the SEC, or subject to the liabilities of Section 18 of the Securities Exchange Act, as amended, except to the extent we specifically request that the material be treated as soliciting material or specifically incorporate this performance graph by reference into a document filed under the Securities Act or the Securities Exchange Act.

Equity Compensation Plan Information—We have an equity compensation plan, which was approved by our stockholders, pursuant to which an aggregate of 200,000 shares of our common stock can be awarded to members of our board of directors. At December 31, 2013, an aggregate of 189,000 shares were available for future award under this plan. See Note 14 to our Consolidated Financial Statements.

Treasury Stock Purchases—In March 2005, our board of directors authorized the repurchase of up to 5.0 million shares of our common stock in open market transactions, including block purchases, or in privately negotiated transactions, which may include transactions with our affiliates. In November 2006, our board of directors authorized the repurchase of an additional 5.0 million shares. We may purchase the stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, we could terminate the program prior to completion. We will use our cash on hand to acquire the shares. Repurchased shares will be retired and cancelled or may be added to our treasury stock and used for employee benefit plans, future acquisitions or other corporate purposes. See Note 14 to the Consolidated Financial Statements.

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data has been derived from our audited Consolidated Financial Statements. The following selected financial data should be read in conjunction with our Consolidated Financial Statements and related Notes and Item 7—"Management's Discussion and Analysis of Financial Condition and Results of Operations."

	Years ended December 31,				
	2009	2010	2011	2012	2013[1]
	(In millions, except per share data)				
STATEMENTS OF OPERATIONS DATA:					
Net sales:					
Chemicals	$1,142.0	$1,449.7	$1,943.3	$1,976.3	$1,732.4
Component products	67.9	76.1	79.8	83.2	92.0
Waste management	14.0	7.7	2.0	27.8	39.2
Total net sales	$1,223.9	$1,533.5	$2,025.1	$2,087.3	$1,863.6
Operating income (loss):					
Chemicals	$(10.6)	$183.2	$553.0	$366.8	$(125.4)
Component products	.7	5.9	6.4	5.4	9.3
Waste management	(27.0)	(30.8)	(38.0)	(26.8)	(22.6)
Total operating income (loss)	$(36.9)	$158.3	$521.4	$345.4	$(138.7)
Net income (loss)	$(38.1)	$63.8	$295.0	$222.1	$(126.9)
Amounts attributable to Valhi stockholders:					
Income (loss) from continuing operations	$(33.0)	$50.7	$214.5	$141.4	$(98.0)
Income (loss) from discontinued operations	(1.2)	(.4)	3.0	18.4	—
Net income(loss)	$(34.2)	$50.3	$217.5	$159.8	$(98.0)
DILUTED EARNINGS PER SHARE DATA:					
Net income (loss)attributable to Valhi stockholders:					
Income (loss) from continuing operations	$(.10)	$.14	$.63	$.41	$(.29)
Income (loss) from discontinued operations	—	—	.01	.06	—
Net income (loss)	$(.10)	$.14	$.64	$.47	$(.29)
Cash dividends	$.133	$.133	$.158	$.192	$.20
Weighted average common shares outstanding	343.0	343.0	342.1	342.0	342.0
STATEMENTS OF CASH FLOW DATA:					
Cash provided by (used in):					
Operating activities	$76.0	$122.2	$292.4	$71.9	$117.1
Investing activities	(44.5)	(93.1)	(220.9)	100.9	(56.2)
Financing activities	(4.7)	228.6	(299.8)	96.0	(286.2)
BALANCE SHEET DATA (at year end):					
Total assets	$2,410.3	$2,714.3	$2,838.0	$3,170.5	$2,967.2
Long-term debt	988.4	922.9	717.4	880.5	741.8
Valhi stockholders' equity	428.7	541.8	657.2	733.6	601.3
Total equity	498.4	818.2	993.0	1,091.7	992.8

(1) In December 2013 we acquired a controlling interest in BMI, Inc. and The Landwell Company and they are included in our Consolidated Balance Sheet at December 31, 2013, see Note 3 to our Consolidated Financial Statements.

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

RESULTS OF OPERATIONS

Business Overview

We are primarily a holding company. We operate through our wholly-owned and majority-owned subsidiaries, including NL Industries, Inc., Kronos Worldwide, Inc., CompX International, Inc., Tremont LLC and Waste Control Specialists LLC ("WCS"). Kronos (NYSE: KRO), NL (NYSE: NL) and CompX (NYSE MKT: CIX) each file periodic reports with the SEC.

We have three consolidated operating segments:

- Chemicals—Our chemicals segment is operated through our majority control of Kronos. Kronos is a leading global producer and marketer of value-added titanium dioxide pigments ("TiO_2"), TiO_2 is used to impart whiteness, brightness, opacity and durability to a wide variety of products, including paints, plastics, paper, fibers and ceramics. Additionally, TiO_2 is a critical component of everyday applications, such as coatings, plastics and paper, as well as many specialty products such as inks, foods and cosmetics.
- Component Products—We operate in the component products industry through our majority control of CompX. CompX is a leading manufacturer of engineered components utilized in a variety of applications and industries. CompX manufactures engineered components that are sold to a variety of industries including recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries.
- Waste Management—WCS is our subsidiary which operates a West Texas facility for the processing, treatment, storage and disposal of a broad range of low-level radioactive, hazardous, toxic and other wastes. WCS obtained a byproduct disposal license in 2008 and began disposal operations at this facility in October 2009. WCS received a low-level radioactive waste ("LLRW") disposal license in September 2009. The Compact LLRW disposal facility commenced operations in 2012, and the Federal LLRW site commenced operations in 2013.

Income From Continuing Operations Overview

Year Ended December 31, 2012 Compared to Year Ended December 31, 2013—

We reported a loss from continuing operations attributable to Valhi stockholders of $98.0 million or $.29 per diluted share in 2013 compared to income from continuing operations of $141.4 million or $.41 per diluted share in 2012.

Our diluted earnings per share from continuing operations attributable to Valhi stockholders decreased from 2012 to 2013 primarily due to the net effects of:

- an operating loss from our Chemicals Segment in 2013 compared to operating income in 2012, partially offset by increased operating income from our Component Products Segment and a decrease in the operating loss at our Waste Management Segment;
- an aggregate non-cash gain related to our purchase of controlling interest in BMI and Landwell in December 2013, consisting of (i) a gain from the remeasurement of our existing interest in BMI and Landwell to estimated fair value and (ii) a bargain purchase gain related to the additional interest in BMI and Landwell acquired;
- a gain from the sale of our TIMET common stock in 2012;
- a real-estate related litigation settlement gain in 2012;
- a gain on excess property sales in 2012;
- a goodwill impairment in 2012;

- a higher loss on prepayment of debt in 2013 as compared to 2012 as a result of redeeming the Kronos term loan; and
- higher general expenses in 2013, primarily due to increased environmental remediation and related expenses.

Our income from continuing operations attributable to Valhi stockholders in 2013 includes:

- a gain of $.14 per diluted share related to our purchase of a controlling interest in BMI and Landwell in December 2013;
- insurance recoveries of $.02 per diluted share;
- a charge of $.01 per diluted share per diluted share related to the voluntary prepayments of the entire $390 million principal amount of Kronos' term loan; and
- a charge of $.05 per diluted share related to a litigation settlement of Kronos.

Our income from continuing operations attributable to Valhi stockholders in 2012 includes:

- a gain of $.04 per diluted share related to the sale of our TIMET common stock;
- income of $.02 per diluted share related to a litigation settlement gain;
- income of $.01 per diluted share related to a gain on the sale of excess property;
- a loss of $.02 per diluted share related to a goodwill impairment; and
- a loss on the prepayment of debt of $.01 per diluted share.

We discuss these amounts more fully below.

Year Ended December 31, 2011 Compared to Year Ended December 31, 2012—

We reported income from continuing operations attributable to Valhi stockholders of $141.4 million or $.41 per diluted share in 2012 compared to $214.5 million or $.63 per diluted share in 2011.

Our diluted earnings per share from continuing operations attributable to Valhi stockholders decreased from 2011 to 2012 primarily due to the net effects of:

- lower operating income from each of our Chemicals and Components Products Segments in 2012 compared to 2011, partially offset by a lower operating loss from our Waste Management Segment;
- a gain from the sale of our TIMET common stock in 2012;
- a real-estate related litigation settlement gain in 2012;
- a gain on excess property sales in 2012;
- a goodwill impairment in 2012;
- a higher loss on prepayment of debt in 2012 as compared to 2011 as a result of calling the remaining balance of Kronos Senior Notes;
- higher insurance recoveries in 2011; and
- higher general expenses in 2012, primarily due to increased environmental remediation and related expenses.

Our income from continuing operations attributable to Valhi stockholders in 2012 includes:

- a gain of $.04 per diluted share related to sale of our TIMET common stock;
- income of $.02 per diluted share related to a litigation settlement gain;
- income of $.01 per diluted share related to a gain on the sale of excess property;

- a loss of $.02 per diluted share related to a goodwill impairment; and
- a loss on the prepayment of debt of $.01 per diluted share.

Our income from continuing operations attributable to Valhi stockholders in 2011 includes:

- insurance recoveries of $.03 per diluted share; and
- income of $.02 per diluted share related to a net decrease in our reserve for uncertain tax positions.

We discuss these amounts more fully below.

Current Forecast for 2014—

We currently expect to report income from continuing operations attributable to Valhi stockholders for 2014 as compared to a loss from continuing operations in 2013 primarily due to the net effects of:

- expected operating income from our Chemicals Segment in 2014 compared to an operating loss in 2013;
- improved operating results at WCS in 2014 as we expect more revenue from the Compact and Federal LLRW disposal facilities which experienced shipment delays in the latter part of 2013;
- the gain related to our purchase of a controlling interest in BMI and Landwell in December 2013;
- lower expected general corporate expenses in 2014 due primarily to lower expected environmental remediation and related expenses; and
- the loss on prepayment of debt in 2013.

Critical accounting policies and estimates

We have based the accompanying "Management's Discussion and Analysis of Financial Condition and Results of Operations" upon our Consolidated Financial Statements. We prepare our Consolidated Financial Statements in accordance with accounting principles generally accepted in the United States of America ("GAAP"). In many cases the accounting treatment of a particular transaction does not require us to make estimates and judgments. However, in other cases we are required to make estimates and judgments that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reported period. On an on-going basis, we evaluate our estimates, including those related to impairments of investments in marketable securities and investments accounted for by the equity method, the recoverability of other long-lived assets (including goodwill and other intangible assets), pension and other postretirement benefit obligations and the underlying actuarial assumptions related thereto, the realization of deferred income and other tax assets and accruals for environmental remediation, litigation, income tax contingencies. We base our estimates on historical experience and on various other assumptions we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the reported amounts of assets, liabilities, revenues and expenses. Actual results might differ significantly from previously-estimated amounts under different assumptions or conditions.

"Our critical accounting policies" relate to amounts having a material impact on our financial position and results of operations, and that require our most subjective or complex judgments. See Note 1 to our Consolidated Financial Statements for a detailed discussion of our significant accounting policies.

- Marketable securities—We own investments in certain companies that we account for as marketable securities carried at fair value or that we account for under the equity method. For these investments, we evaluate the fair value at each balance sheet date. We use quoted market prices, Level 1 inputs as defined in Accounting Standards Codification ("ASC") 820-10-35, Fair Value Measurements and Disclosures, to determine fair value for certain of our common stock, marketable debt securities and publicly traded investees. For other of our marketable debt securities, the fair value is generally determined using Level 2 inputs as defined in the ASC because although these securities are traded in many cases the market is not active and the year-end valuation is based on the last trade of the year which may be several days prior to December 31. We

use Level 3 inputs to determine fair value of our investment in Amalgamated Sugar Company LLC. See Note 4 to our Consolidated Financial Statements. We record an impairment charge when we believe an investment has experienced an other than temporary decline in fair value below its cost basis (for marketable securities) or below its carrying value (for equity method investees). Further adverse changes in market conditions or poor operating results of underlying investments could result in losses or our inability to recover the carrying value of the investments that may not be reflected in an investment's current carrying value, thereby possibly requiring us to recognize an impairment charge in the future.

At December 31, 2013, the carrying value (which equals their fair value) of substantially all of our marketable securities equaled or exceeded the cost basis of each investment. Our investment in The Amalgamated Sugar Company LLC represents approximately 97% of the aggregate carrying value of all of our marketable securities at December 31, 2013. The $250 million carrying value is equal to its cost basis.

- Goodwill—Our net goodwill totaled $379.7 million at December 31, 2013 resulting primarily from our various step acquisitions of Kronos and NL (which occurred before the implementation of the current accounting standards related to noncontrolling interest) and to a lesser extent CompX's purchase of various businesses. In accordance with the applicable accounting standards for goodwill, we do not amortize goodwill.

We perform a goodwill impairment test annually in the third quarter of each year. Goodwill is also evaluated for impairment at other times whenever an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. A reporting unit can be a segment or an operating division based on the operations of the segment. For example, our Chemicals Segment produces a globally coordinated homogeneous product whereas our Component Products Segment operates as two distinct business units. If the fair value of the reporting unit is less than its book value, the goodwill is written down to estimated fair value.

For our Chemicals Segment, we use Level 1 inputs of publicly traded market prices to compare the book value to assess impairment. We also consider control premiums when assessing fair value. Substantially all of the goodwill for our Component Products Segment relates to our security products reporting unit. In September 2011, the Financial Accounting Standards Board issued ASU No. 2011-08, which provided new guidance on testing goodwill for impairment. The new guidance allows an entity to first assess qualitative factors to determine whether it is necessary to perform the two-step quantitative goodwill impairment test. An entity is no longer required to calculate the fair value of a reporting unit unless the entity determines, based on a qualitative assessment considering the totality of relevant events and circumstances, that it is more likely than not that its fair value of the reporting unit is less than its carrying amount. We adopted this accounting standard in the third quarter of 2013 as it relates to our security products reporting unit.

Considerable management judgment is necessary to evaluate the qualitative impact of events and circumstances on the fair value of a reporting unit. Events and circumstances considered in our impairment evaluations, such as historical profits and stability of the markets served, are consistent with factors utilized with our internal projections and operating plan. However, future events and circumstances could result in materially different findings which could result in the recognition of a material goodwill impairment.

We performed our annual goodwill impairment test in the third quarter of 2013 for each of our reporting units and concluded there was no impairment of the goodwill for those reporting units. Such impairment test as it relates to our security products reporting unit was based on our qualitative assessment, and as a result a quantitative assessment was not required for such reporting unit for 2013.

- Long-lived assets— We assess property, equipment and capitalized operating permit costs for impairment only when circumstances as specified in ASC 360-10-35, Property, Plant, and Equipment, indicate an impairment may exist. As a result of continued operating losses, certain long-lived assets of our Waste Management Segment were evaluated for impairment as of December 31, 2013. WCS has had limited operations as it sought regulatory approval for several licenses it needs for full scale operations. WCS obtained a byproduct disposal license in 2008 and began disposal operations in October 2010. In January 2010 WCS received a LLRW disposal

permit. Construction of the Compact and Federal LLRW sites began in January 2011. The Compact LLRW site was fully certified and operational in April 2012, and the Federal LLRW site was fully certified and operational in September 2012 and commenced operations in 2013. Revenues in 2013 dropped significantly in the latter half of 2013 as customers were unable to ship waste to WCS as a result of an industry-wide shortage of approved shipping containers. WCS received the first of three shipping containers it ordered in 2012 in the first quarter of 2014 and expects revenue in 2014 to increase significantly over the latter half of 2014 as customers will be able to ship waste to WCS in its containers. Our impairment analysis is based on estimated future undiscounted cash flows of WCS' operations, and this analysis indicated no impairment was present at December 31, 2013 and that the carrying value of WCS is recoverable as the aggregate future undiscounted cash flow estimate exceeded the carrying value of WCS' net assets by at least two times. Considerable management judgment is necessary to evaluate the impact of operating changes and to estimate future cash flows. Assumptions used in our impairment evaluations, such as the timing and amounts of revenue associated with our LLRW facilities, forecasted growth rates and our cost of capital, are consistent with our internal projections and operating plans. However, if our future cash flows from operations less capital expenditures were to drop significantly below our current expectations (approximately 65%), it is reasonably likely we would conclude an impairment was present. At December 31, 2013 the carrying value of WCS' total assets was $270.1 million.

As a result of continued operating losses in CompX's Marine Components reporting unit, we evaluated the recoverability of the Marine Components long-lived assets during the third quarter of 2013. We determined that the undiscounted cash flows exceed the current net asset value and therefore the Marine Components long-lived assets are not impaired. However, if our future cash flows from operations less capital expenditures were to drop significantly below our current expectations (approximately 85% below our expectations for each of the Custom Marine and Livorsi Marine units), it is reasonably likely we would conclude an impairment was present. At December 31, 2013 the net asset carrying values of Custom Marine and Livorsi Marine were $3.4 million and $2.8 million, respectively. No other long-lived assets in our other reporting units were tested for impairment during 2013 because there were no circumstances indicating an impairment might exist.

- Benefit plans—We provide a range of benefits including various defined benefit pension and other postretirement benefits ("OPEB") for our employees. We record annual amounts related to these plans based upon calculations required by GAAP, which make use of various actuarial assumptions, such as: discount rates, expected rates of returns on plan assets, compensation increases, employee turnover rates, mortality rates and expected health care trend rates. We review our actuarial assumptions annually and make modifications to the assumptions based on current rates and trends when we believe appropriate. As required by GAAP, modifications to the assumptions are generally recorded and amortized over future periods. Different assumptions could result in the recognition of materially different expense amounts over different periods of times and materially different asset and liability amounts in our Consolidated Financial Statements. These assumptions are more fully described below under "—Assumptions on Defined Benefit Pension Plans and OPEB Plans."
- Income taxes—We recognize deferred taxes for future tax effects of temporary differences between financial and income tax reporting. We record a valuation allowance to reduce our deferred income tax assets to the amount that is believed to be realized under the more-likely-than-not recognition criteria. While we have considered future taxable income and ongoing prudent and feasible tax planning strategies in assessing the need for a valuation allowance, it is possible that we may change our estimate of the amount of the deferred income tax assets that would more-likely-than-not be realized in the future, resulting in an adjustment to the deferred income tax asset valuation allowance that would either increase or decrease, as applicable, reported net income in the period such change in estimate was made. For example, we have substantial net operating loss carryforwards in Germany (the equivalent of $842 million for German corporate purposes and $127 million for German trade tax purposes at December 31, 2013). At December 31, 2013, we have concluded that no deferred income tax asset valuation allowance is required to be recognized with respect to such carryforwards, principally because (i) such carryforwards have an indefinite carryforward period, (ii) we have utilized a portion of such carryforwards during the most recent three-year period and (iii) we currently expect to utilize the remainder of such carryforwards over the long term. However, prior to the complete utilization of such carryforwards, if we were to

generate losses in our German operations for an extended period of time, it is possible that we might conclude the benefit of such carryforwards would no longer meet the more-likely-than-not recognition criteria, at which point we would be required to recognize a valuation allowance against some or all of the then-remaining tax benefit associated with the carryforwards.

We record a reserve for uncertain tax positions where we believe it is more-likely-than-not our tax position will not prevail with the applicable tax authorities. From time to time, tax authorities will examine certain of our income tax returns. Tax authorities may interpret tax regulations differently than we do. Judgments and estimates made at a point in time may change based on the outcome of tax audits and changes to or further interpretations of regulations, thereby resulting in an increase or decrease in the amount we are required to accrue for uncertain tax positions (and therefore a decrease or increase in our reported net income in the period of such change). Our reserve for uncertain tax positions changed during 2013. See Note 12 to our Consolidated Financial Statements.

We also evaluate at the end of each reporting period whether or not some or all of the undistributed earnings of our non-U.S. subsidiaries are not permanently reinvested (as that term is defined in GAAP). While we may have concluded in the past that some undistributed earnings are permanently reinvested, facts and circumstances can change in the future, such as a change in the expectation regarding the capital needs of our foreign subsidiaries, could result in a conclusion that some or all of the undistributed earnings are no longer permanently reinvested. If our prior conclusions change, we would be required to recognize a deferred income tax liability in an amount equal to the estimated incremental U.S. income taxes and withholding tax liability that would be generated if all such previously-considered permanently reinvested undistributed earnings were to be distributed to the U.S.

- Litigation and environmental liabilities—We are involved in numerous legal and environmental actions in part due to NL's former involvement in the manufacture of lead-based products. In accordance with applicable GAAP for accounting for contingencies, we record accruals for these liabilities when estimated future expenditures associated with such contingencies become probable, and we can reasonably estimate the amounts of such future expenditures. However, new information may become available to us, or circumstances (such as applicable laws and regulations) may change, thereby resulting in an increase or decrease in the amount we are required to accrue for such matters (and therefore a decrease or increase in our reported net income in the period of such change). At December 31, 2013 we have recorded total accrued environmental liabilities of $122.7 million.
- Business combinations—During 2013 we acquired a controlling interest in BMI and Landwell. We previously held a noncontrolling interest in each of these companies. The application of the purchase method of accounting for business combinations requires us to use significant estimates and assumptions in the determination of the estimated fair value of assets acquired and liabilities assumed; it also requires us to remeasure our existing ownership interest in these companies to estimated fair value. Our estimates of the fair values of assets acquired and liabilities assumed are based upon assumptions we believe are reasonable, and when appropriate, include assistance from independent third-party valuation firms. See Note 3 to our Consolidated Financial Statements.

Operating income (loss) for each of our three operating segments is impacted by certain of these significant judgments and estimates, as summarized below:

- Chemicals—allowance for doubtful accounts, reserves for obsolete or unmarketable inventories, impairment of equity method investments, goodwill and other long-lived assets, defined benefit pension plans; and loss accruals.
- Component Products—impairment of goodwill and long-lived assets and loss accruals.
- Waste Management—impairment of long-lived assets and loss accruals.

In addition, general corporate and other items are impacted by the significant judgments and estimates for impairment of marketable securities and equity method investees, defined benefit pension and OPEB plans, and loss accruals.

Segment Operating Results—2012 Compared to 2013 and 2011 Compared to 2012—

Chemicals—

We consider TiO_2 to be a "quality of life" product, with demand affected by gross domestic product, or GDP, and overall economic conditions in our markets located in various regions of the world. Over the long-term, we expect demand for TiO_2 will grow by 2% to 3% per year, consistent with our expectations for the long-term growth in GDP. However, even if we and our competitors maintain consistent shares of the worldwide market, demand for TiO_2 in any interim or annual period may not change in the same proportion as the change in GDP, in part due to relative changes in the TiO_2 inventory levels of our customers. We believe that our customers' inventory levels are influenced in part by their expectation for future changes in market TiO_2 selling prices as well as their expectation for future availability of product. Although certain of our TiO_2 grades are considered specialty pigments, the majority of our grades and substantially all of our production are considered commodity pigment products with price and availability being the most significant competitive factors along with quality and customer service.

The factors having the most impact on our reported operating results are:

Our TiO_2 sales and production volumes,
TiO_2 selling prices,
Manufacturing costs, particularly raw materials such as third-party feedstock ore, maintenance and energy-related expenses, and
Currency exchange rates (particularly the exchange rate for the U.S. dollar relative to the euro, the Norwegian krone and the Canadian dollar).

Our key performance indicators are our TiO_2 average selling prices, our level of TiO_2 sales and production volumes and the cost of our third-party feedstock ore. TiO_2 selling prices generally follow industry trends and the selling prices will increase or decrease generally as a result of competitive market pressures.

	Years ended December 31,			% Change	
	2011	2012	2013	2011-12	2012-13
	(Dollars in millions)				
Net sales	$1,943.3	$1,976.3	$1,732.4	2 %	(12)%
Cost of sales	1,197.5	1,418.2	1622.6	18 %	14 %
Gross margin	$745.8	$558.1	$109.8	(25)%	(80)%
Operating income (loss)	$553.0	$366.8	$(125.4)	(34)%	(134)%
Percent of net sales:					
Cost of sales	62 %	72 %	94 %		
Gross margin	38 %	28 %	6 %		
Operating income (loss)	28 %	18 %	(7)%		
TiO_2 operating statistics:					
Sales volumes*	503	470	498	(6)%	6 %
Production volumes*	550	469	474	(15)%	1 %
Production rate as percent of capacity	103 %	85 %	86 %		
Percent change in TiO_2 net sales:					
TiO_2 product pricing				10 %	(19)%
TiO_2 sales volumes				(6)	6
TiO_2 product mix				2	-
Changes in currency exchange rates				(4)	1
Total				2 %	(12)%

*Thousands of metric tons

Industry conditions and 2013 overview – In the second quarter of 2013, we announced price increases for our TiO_2 products in all of our markets, implementation of which began in June 2013. In the third and fourth quarters of 2013, we notified customers of additional price increases to be implemented as contract terms and

market conditions allow. As a result, after about a year of decreasing selling prices within the TiO_2 industry, our selling prices have generally stabilized. Our average selling prices have remained stable through the last three quarters of 2013, and our average selling prices in the fourth quarter of 2013 were 1% higher as compared to the third quarter of 2013. Demand for TiO_2 products has generally been strong in 2013, primarily in European and export markets, as customers have generally depleted their inventories in response to general global economic uncertainty.

While we operated our production facilities at full practical capacity rates in the first quarter of 2012, we operated our facilities at reduced rates during the remainder of 2012 (approximately 86% of practical capacity in the second quarter, approximately 71% in the third quarter and approximately 80% in the fourth quarter) to align production levels and inventories to current and anticipated near-term customer demand levels. We continued to operate our production facilities at reduced capacity rates in 2013 (approximately 92%, 90%, 82% and 81% of practical capacity in the first through fourth quarter periods, respectively). Our production capacity utilization rates in the second half of 2013 were impacted by the lockout at our Canadian production facility, as discussed below.

We experienced significantly higher costs for our raw materials such as third party feedstock ore and petroleum coke in 2012. We operate two ilmenite mines in Norway, the production from which provides all of the feedstock for our European sulfate process facilities as well as third party ilmenite ore sales. Our cost of sales per metric ton of TiO_2 sold in the first half of 2013 was significantly higher than TiO_2 sold in the first half of 2012, as a substantial portion of the TiO_2 products we sold in the first quarter of 2012 (and a portion of the TiO_2 products we sold in the second quarter of 2012) was produced with lower-cost feedstock ore purchased in 2011, while a substantial portion of the TiO_2 products we sold in the first quarter of 2013 (and a portion of the TiO_2 products we sold in the second quarter of 2013) was produced with higher-cost feedstock ore purchased in 2012. We have seen some moderation in the cost of TiO_2 feedstock ore procured from third parties in 2013, but such reductions did not begin to be significantly reflected in our cost of sales until the third quarter of 2013. As expected, our cost of sales per metric ton of TiO_2 sold in the second half of 2013 was lower than the cost of sales per metric ton of TiO_2 sold in the second half of 2012, primarily due to the lower feedstock ore costs. If third-party feedstock ore costs reflected in our cost of sales in 2013 had been based on our current cost of third-party feedstock ore, our cost of sales for 2013 would have been approximately $218 million lower.

Net Sales—Our Chemicals Segment's net sales decreased 12% or $243.9 million in 2013 compared to 2012, primarily due to the net effects of a 19% decrease in average TiO_2 selling prices (which decreased net sales by approximately $375 million) and a 6% increase in sales volumes (which increased net sales by approximately $119 million). TiO_2 selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

Our Chemicals Segment's sales volumes increased 6% in 2013 as compared to 2012 due to increased customer demand primarily in European and certain export markets, partially offset by decreased demand in North American markets. In addition, we estimate the favorable effect of changes in currency exchange rates increased our net sales by approximately $18 million, or 1%, as compared to 2012.

Our Chemicals Segment's net sales increased 2% or $33.0 million in 2012 compared to 2011, primarily due to the net effects of a 10% increase in average TiO_2 selling prices (which increased net sales by approximately $194 million) and a 6% decrease in sales volumes (which decreased net sales by approximately $117 million). TiO_2 selling prices will increase or decrease generally as a result of competitive market pressures, changes in the relative level of supply and demand as well as changes in raw material and other manufacturing costs.

Our Chemicals Segment's sales volumes decreased 6% in 2012 as compared to 2011 due to decreased customer demand in European markets partially offset by higher sales in U.S. and export markets. In addition, we estimate the unfavorable effect of changes in currency exchange rates decreased our net sales by approximately $82 million, or 4%, as compared to 2011.

Cost of Sales—Our Chemicals Segment's cost of sales increased $204.4 million or 14% in 2013 compared to 2012 due to the net impact of higher raw materials and other production costs of approximately $115 million (primarily caused by the higher third-party feedstock ore costs), a 6% increase in sales volumes, a 1% increase in production volumes and currency fluctuations (primarily the euro). Our cost of sales per metric ton of TiO_2 sold in the first half of 2013 was significantly higher than TiO_2 sold in the first half of 2012, as a substantial

portion of the TiO_2 products we sold in the first quarter of 2012 (and a portion of the TiO_2 products we sold in the second quarter of 2012) was produced with lower-cost feedstock ore purchased in 2011, while a substantial portion of the TiO_2 products we sold in the first quarter of 2013 (and a portion of the TiO_2 products we sold in the second quarter of 2013) was produced with higher-cost feedstock ore purchased in 2012. As expected, the cost of sales per metric ton of TiO_2 sold in the second half of 2013 was lower than the cost of sales per metric ton of TiO_2 sold in the second half of 2012 primarily due to the lower feedstock ore costs as discussed and quantified above. Cost of sales as a percentage of net sales increased to 94% in 2013 compared to 72% in 2012 primarily due to the combined effects of higher raw materials and other production costs and the lower average TiO_2 selling prices as discussed above. In addition, cost of sales in 2013 includes approximately $19 million of unabsorbed fixed production and other manufacturing costs associated with the lockout at the Canadian TiO_2 production facility and approximately $9 million of one-time costs resulting from the terms of the new collective bargaining agreement for our Canadian workforce, each of which were charged directly to cost of sales as discussed below.

Unionized employees in our Canadian TiO_2 production facility were covered by a collective bargaining agreement that expired June 15, 2013. The Canadian facility represents approximately 19% of our worldwide TiO_2 production capacity. The union employees represented by the Confederation des Syndicat National (CSN) rejected our revised global offer, and we declared a lockout of unionized employees upon the expiration of the existing contract. Effective the end of November 2013, a new collective bargaining agreement was reached with CSN and production at the facility resumed in February 2014. During the lockout we operated our Canadian plant at approximately 15% of the plant's capacity with non-union management employees. The reduction in our TiO_2 production volumes at our Canadian facility resulted in approximately $19 million of unabsorbed fixed production and other manufacturing costs that were charged directly to cost of sales. In addition, we recognized approximately $9 million in expenses associated with reaching a new collective bargaining agreement, consisting of a net $7 million non-cash charge due to the curtailment of one of our Canadian defined benefit pension plans and our Canadian other postretirement benefit plan and approximately $2 million of severance and other back-to-work expenses.

We reduced our TiO_2 production volumes during 2012 in order to align inventory levels with lower demand, which resulted in approximately $25 million of unabsorbed fixed production costs that were charged directly to cost of sales.

Our Chemicals Segment's cost of sales increased $220.7 million or 18% in 2012 compared to 2011 due to the net impact of higher raw materials and other production costs of approximately $331 million (primarily feedstock ore and petroleum coke), a 6% decrease in sales volumes, a 15% decrease in production volumes and currency fluctuations (primarily the euro). Cost of sales as a percentage of net sales increased to 72% in 2012 compared to 62% in 2011 primarily due to the net effects of higher raw materials and other production costs, the unfavorable effects of unabsorbed fixed production costs resulting from reduced production volumes and higher average selling prices. The reduction in our TiO_2 production volumes during 2012, as discussed above, resulted in approximately $25 million of unabsorbed fixed production costs which were charged directly to cost of sales. Additionally, 2012 reflects the benefit of lower raw material costs in the first quarter of 2012 (as compared to current costs) as lower cost raw materials purchased at the end of 2011 were used in the first quarter 2012 production process.

Gross Margin and Operating Income—Our Chemicals Segment's operating income decreased significantly in 2013, primarily due to the significant decrease in our gross margin, which decreased to 6% in 2013 compared to 28% in 2012, and the 2013 litigation settlement charge of $35 million, see Note 17 to our Consolidated Financial Statements. As discussed and quantified above, our gross margin has decreased primarily due to the net effects of lower selling prices, higher manufacturing costs (primarily raw materials), higher sales volumes, costs associated with reaching a new Canadian collective bargaining agreement and lower unabsorbed fixed costs charged directly to cost of sales. Additionally, changes in currency exchange rates negatively affected our gross margin and operating loss. We estimate that changes in currency exchange rates decreased operating income by approximately $2 million in 2013 compared to 2012.

Our Chemicals Segment's operating income decreased significantly in 2012, primarily due to the significant decrease in our gross margin, which decreased to 28% in 2012 compared to 38% in 2011. As discussed and quantified above, our Chemicals Segment's gross margin has decreased primarily due to the net effects of higher manufacturing costs (primarily raw materials), higher selling prices, lower sales volumes and unabsorbed fixed costs related to lower production volumes. Additionally, changes in currency exchange rates have negatively

affected our gross margin and operating income. We estimate that changes in currency exchange rates decreased operating income by approximately $10 million in 2012 compared to 2011.

Our Chemicals Segment's operating income (loss) is net of amortization of purchase accounting adjustments made in conjunction with our acquisitions of interests in NL and Kronos. As a result, we recognize additional depreciation expense above the amounts Kronos reports separately, substantially all of which is included within cost of sales. We recognized additional depreciation expense of $2.8 million in 2011 and $2.6 million in each of 2012 and 2013, which reduced our reported Chemicals Segment's operating income (loss) as compared to amounts reported by Kronos.

Currency Exchange Rates—Our Chemicals Segment has substantial operations and assets located outside the United States (primarily in Germany, Belgium, Norway and Canada). The majority of our sales generated from foreign operations are denominated in currencies other than the U.S. dollar, principally the euro, other major European currencies and the Canadian dollar. A portion of our sales generated from our foreign operations is denominated in the U.S. dollar. Certain raw materials used worldwide, primarily titanium-containing feedstocks, are purchased in U.S. dollars, while labor and other production costs are purchased primarily in local currencies. Consequently, the translated U.S. dollar value of our foreign sales and operating results are subject to currency exchange rate fluctuations which may favorably or unfavorably impact reported earnings and may affect the comparability of period-to-period operating results. In addition to the impact of the translation of sales and expenses over time, our foreign operations also generate currency transaction gains and losses which primarily relate to the difference between the currency exchange rates in effect when non-local currency sales or operating costs are initially accrued and when such amounts are settled with the non-local currency.

Overall, fluctuations in currency exchange rates had the following effects on our Chemicals Segment's net sales and operating income (loss):

Impact of changes in currency exchange rates - 2013 vs. 2012

	Transaction gains/(losses) recognized			Translation gain/loss-impact of rate changes	Total currency impact 2013 vs. 2012
	2012	2013	Change		
			(in millions)		
Impact on:					
Net sales	$-	$ -	$-	$ 18	$ 18
Operating income	(1)	(4)	(3)	1	(2)

Impact of changes in currency exchange rates - 2012 vs. 2011

	Transaction gains/(losses) recognized			Translation gain/loss-impact of rate changes	Total currency impact 2011 vs. 2012
	2011	2012	Change		

(in millions)

Impact on:					
Net sales	$-	$ -	$-	$ (82)	$ (82)
Operating loss	3	(1)	(4)	(6)	(10)

Outlook— During 2013 we operated our Chemicals Segment's production facilities at 86% of practical capacity. Our production utilization rates in 2013 were impacted by the lockout at our Canadian production facility that began in June 2013, as we operated our Canadian plant at approximately 15% of the plant's capacity with non-union management employees during the lockout. We believe that our annual attainable production capacity for 2014 is approximately 555,000 metric tons. While we expect our production volumes to be higher in 2014 as compared to 2013, we expect that we will operate at less-than-full production capacity for 2014, due principally to the ramp-up of operations at our Canadian facility following the end of the lockout in December 2013 as well as the implementation of certain productivity-enhancing capital improvement projects at other facilities which will result in longer-than-normal maintenance shutdowns in certain instances. Assuming economic conditions do not deteriorate in the various regions of the world, we expect our sales volumes to be higher in 2014 as compared to 2013. We will continue to monitor current and anticipated near-term customer demand levels and align our production and inventories accordingly.

We have seen some moderation in the cost of TiO_2 feedstock ore procured in 2013; however, these reductions did not begin to be significantly reflected in our cost of sales until the third quarter of 2013. As expected, our cost of sales per metric ton of TiO_2 sold in the second half of 2013 was lower than the cost of sales per metric ton of TiO_2 sold in the second half of 2012, primarily due to the lower feedstock ore costs. Given the time lag between when we procure third-party feedstock ore and when the TiO_2 product produced with such third-party feedstock is sold and recognized in our cost of sales, we expect our cost of sales per metric ton of TiO_2 sold in 2014 will be lower than the cost of sales per metric ton of TiO_2 sold in 2013. Although the cost of feedstock ore has and continues to moderate, such reductions have been inadequate to compensate for the decline in selling prices for our products over the past year. We started 2013 with selling prices 16% lower than the beginning of 2012, and our average selling prices at the end of 2013 were 7% below prices at the end of 2012 (with most of the decline during 2013 occurring in the first quarter). In addition, our average selling prices at the end of 2013 were slightly higher as compared to our average selling prices during the year 2013. In the second quarter of 2013, we announced price increases for our TiO_2 products in all of our markets, implementation of which began in June 2013. In the third and fourth quarters of 2013, we notified customers of additional price increases to be implemented as contract terms and market conditions allow. Industry data indicates that overall TiO_2 inventory held by producers has been significantly decreased and we believe most customers hold very low inventories of TiO_2 with many operating on a just-in-time basis. As a result lead times for delivery are increasing. With the strong sales volumes experienced in 2013, we continue to see evidence of improvement in demand for our TiO_2 products, which we believe will support implementation of additional selling price increases in the near term.

Overall, we expect that our Chemicals Segment's operating income in 2014 will be higher as compared to 2013, as a result of:

- the favorable effect of lower-cost feedstock ore,
- the favorable effects of anticipated higher sales and production volumes in 2014,
- the litigation settlement charge recognized in 2013, and
- the favorable impact of increases in our selling prices that we would be able to achieve during 2014.

Due to the constraints, high capital costs and extended lead time associated with adding significant new TiO_2 production capacity, especially for premium grades of TiO_2 products produced from the chloride process, we believe increased and sustained profit margins will be necessary to financially justify major expansions of TiO_2 production capacity required to meet expected future growth in demand. As a result of customer decisions over the last year and the resulting adverse effect on global TiO_2 pricing, industry projects to increase TiO_2 production capacity have been cancelled or deferred indefinitely. Given the lead time required for such production capacity expansions, we expect a prolonged shortage of TiO_2 products will occur as economic conditions improve and global demand levels for TiO_2 continue to increase

Our expectations for our future operating results are based upon a number of factors beyond our control, including worldwide growth of gross domestic product, competition in the marketplace, continued operation of competitors, unexpected or earlier-than-expected capacity additions or reductions and technological advances. If actual developments differ from our expectations, our results of operations could be unfavorably affected.

Component Products—

Our Component Products Segment's product offerings consist of a significantly large number of products that have a wide variation in selling price and manufacturing cost, which results in certain practical limitations on our ability to quantify the impact of changes in individual product sales quantities and selling prices on our net sales, cost of goods sold and gross margin. In addition, small variations in period-to-period net sales, cost of goods sold and gross margin can result from changes in the relative mix of our products sold. The key performance indicator for our Component Products Segment is operating income margins.

On December 28, 2012, we completed the sale of our Component Products Segment's furniture components reporting unit to a competitor of that unit for proceeds (net of expenses) of approximately $58.0 million in cash. We recognized a pre-tax gain of $23.7 million on the disposal of these operations ($15.7 million, net of income taxes and noncontrolling interest). Our furniture components reporting unit primarily sold products with lower average margins and higher commodity raw material content than other units of our Component Products business. We believe disposing of our furniture components reporting unit enables us to focus more effort on continuing to develop the remaining portion of our business that we believe has greater opportunity for higher returns and with less volatility in the cost of commodity raw materials. See Note 3 to the Consolidated Financial Statements. Unless otherwise noted the results of operations in management's discussion and analysis is focused on continuing operations.

	Years ended December 31,			% Change	
	2011	2012	2013	2011-12	2012-13
	(Dollars in millions)				
Net sales	$ 79.8	$ 83.2	$ 92.0	4 %	11 %
Cost of sales	55.6	58.9	64.5	6 %	10 %
Gross margin	$ 24.2	$ 24.3	$ 27.5	1 %	13 %
Operating income	$ 6.4	$ 5.4	$ 9.3	(15)%	72 %
Percent of net sales:					
Cost of sales	70 %	71 %	70 %		
Gross margin	30 %	29 %	30 %		
Operating income	8 %	7 %	10 %		

Net Sales—Our Component Products Segment's net sales increased approximately $8.8 million in 2013 principally due to higher demand for high security pin tumbler locks within the security products reporting unit, and to a lesser extent from an increase in our marine component reporting unit sales outside of the high performance boat market through gains in market share. Relative changes in selling prices did not have a material impact on net sales comparisons.

Our Component Products Segment's net sales increased approximately $3.4 million in 2012 primarily due to growth in customer demand within both of our reporting units resulting from somewhat improved economic conditions in North America. Additionally, our marine components reporting unit experienced a $.9 million increase in sales to the ski/wakeboard boat market. Relative changes in selling prices did not have a material impact on net sales comparisons.

Costs of Goods Sold and Gross Margin—Our Component Products Segment's cost of sales and gross margin both increased from 2012 to 2013 primarily due to increased sales volumes. As a percentage of sales, cost of goods sold decreased 1% resulting in an increase in gross margin of 1% primarily due to improved cost efficiencies from higher sales, partially offset by higher self-insured medical costs in 2013.

Our Component Products Segment's cost of sales and gross margin both increased from 2011 to 2012 primarily due to increased sales volumes. As a percentage of sales, cost of goods sold increased 1% resulting in a decrease in gross margin of 1% primarily due to the net effects of the increase in sales partially offset by higher self-insured medical costs.

Operating Income—Our Component Products Segment operating income improved in 2013 compared to 2012. Operating costs and expenses consists primarily of sales and administrative related personnel costs, sales commissions and advertising expenses directly related to product sales and administrative costs relating to business unit and corporate management activities, as well as gains and losses on plant, property and equipment. Operating costs and expenses increased in 2013 compared to 2012, and increased in 2012 as compared to 2011, as a result of increased administrative support costs relating to the higher sales. Additionally, in 2012 we incurred higher costs relating to the assets held for sale.

We recorded write-downs on assets held for sale of $1.1 million and $1.2 million in 2011 and 2012, respectively, relating to certain facilities held for sale that were no longer in use.

General—Our Component Products Segment's profitability primarily depends on our ability to utilize our production capacity effectively, which is affected by, among other things, the demand for our products and our ability to control our manufacturing costs, primarily comprised of labor costs and materials. The materials used in our products consist of purchased components and raw materials some of which are subject to fluctuations in the commodity markets such as zinc, brass and stainless steel. Total material costs represented approximately 44% of our cost of sales in 2013, with commodity related raw materials accounting for approximately 11% of our cost of sales. Worldwide commodity raw material costs increased throughout 2011, although during 2012 and 2013 they were mostly stable. We occasionally enter into short-term commodity related raw material supply arrangements to mitigate the impact of future increases in commodity related raw material costs. These arrangements generally provide for stated unit prices based upon specified purchase volumes, which helps us to stabilize commodity related raw material purchase prices to a certain extent. We enter into such arrangements for zinc and brass. We expect commodity related raw material prices to moderately increase in 2014 in conjunction with higher demand as a result of the expected growth in the world wide economy. These raw materials purchased on the spot market are sometimes subject to unanticipated and sudden price increases. We generally seek to mitigate the impact of fluctuations in commodity raw material costs on our margins through improvements in production efficiencies or other operating cost reductions. In the event we are unable to offset cost increases for these raw materials with other cost reductions, it may be difficult to recover those cost increases through increased product selling prices or raw material surcharges due to the competitive nature of the markets served by our products. Consequently, overall operating margins may be affected by raw material cost pressures.

Outlook— Consistent with the current state of the North American economy, overall demand from our customers continues to be subject to instability. While we experienced some increase in customer demand across most markets in 2013, it is uncertain the extent that sales will continue to grow during 2014. While changes in market demand are not within our control, we are focused on the areas we can impact. Staffing levels are continuously evaluated in relation to sales order rates which may result in headcount adjustments, to the extent possible, to match staffing levels with demand. We expect our continuous lean manufacturing and cost improvement initiatives to positively impact our productivity and result in a more efficient infrastructure. Additionally, we continue to seek opportunities to gain market share in markets we currently serve, to expand into new markets and to develop new product features in order to mitigate the impact of changes in demand as well as broaden our sales base.

Volatility in the costs of commodity raw materials is ongoing. Our primary commodity raw materials are zinc, brass and stainless steel, which together represent approximately 11% of our total cost of goods sold. We generally seek to mitigate the impact of fluctuations in commodity raw material costs on our margins through improvements in production efficiencies or other operating cost reductions. In the event we are unable to offset commodity raw material cost increases with other cost reductions, it may be difficult to recover those cost increases through increased product selling prices or surcharges due to the competitive nature of the markets served by our products. Additionally, significant surcharges may negatively affect our margins as they typically only recover the increased cost of the raw material without adding margin dollars resulting in a lower margin percentage. Consequently, overall operating margins may be negatively affected by commodity raw material cost pressures.

Waste Management—

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net sales	$2.0	$27.8	$39.2
Cost of sales	25.3	35.0	42.3

Gross margin	$(23.3)	$(7.2)	$(3.1)
Operating loss	$(38.0)	$(26.8)	$(22.6)

General—We have operated our Waste Management Segment's waste management facility on a relatively limited basis while we navigated the regulatory licensing and permitting requirements for the disposal of byproduct waste material and a broad range of LLRW and mixed LLRW. In May 2008, the TCEQ issued us a license for the disposal of byproduct material. Byproduct material includes uranium or thorium mill tailings as well as equipment, pipe and other materials used to handle and process the mill tailings. We began construction of the byproduct facility infrastructure at our site in Andrews County, Texas in the first quarter of 2008, and this facility

began disposal operations in October 2009. In January 2009, the TCEQ issued a near-surface LLRW disposal license to us. This license was signed in September 2009. Construction of the Compact and Federal LLRW sites began in January 2011. The Compact LLRW site was fully certified and operational in April 2012, and the Federal LLRW site was fully certified and operational in September 2012 and received its first waste for disposal in the latter part of the second quarter of 2013.

Net Sales and Operating Loss—The Waste Management Segment's sales increased significantly during the first half of 2013 compared to the same period of 2012, as we continued to accept shipments for disposal at our recently-completed Compact LLRW disposal facility and we received our first shipments for disposal in the Federal LLRW disposal facility in the latter part of the second quarter of 2013; however, during the second half of 2013 we experienced a significant decrease in sales due to lower volumes of shipments received for disposal in the Compact LLRW disposal facility, primarily because there has been an industry-wide temporary shortage of shipping containers needed to transport LLRW. We currently expect this issue to be resolved in the first half of 2014; see below. The Waste Management sales increased in 2012 and its operating loss decreased as we were able to begin receiving LLRW waste for disposal with the certification of our two facilities during the second and late third quarters of 2012. We recognized an operating loss in all periods because we have not yet achieved sufficient revenues to offset the high cost structure associated with operating under our byproduct and LLRW disposal licenses relative to the waste treatment and disposal volume, in part because we did not receive LLRW for disposal in the Federal LLRW disposal facility until the latter part of the second quarter of 2013. We continue to seek to increase our Waste Management Segment's sales volumes from waste streams permitted under our current licenses.

Outlook—Having obtained the final regulatory license needed to commence full scale operations, and with both of the Compact LLRW disposal facility and the Federal LLRW disposal facility certified and operational, we can now provide "one-stop shopping" for hazardous, toxic and LLRW and radioactive byproduct material. WCS has the broadest range of capabilities of any commercial enterprise in the U.S. for the storage, treatment and permanent disposal of these materials, which we believe gives WCS a significant and valuable competitive advantage in the industry. We are also exploring opportunities to obtain certain types of new business (including disposal and storage of certain other types of waste) that, if obtained, could increase our Waste Management Segment's sales, and decrease our Waste Management Segment's operating loss. Our ability to increase our Waste Management Segment's sales volumes through these waste streams, particularly as it relates to the Compact and Federal LLRW disposal facilities, together with improved operating efficiencies through further cost reductions and increased capacity utilization, are important factors in improving our Waste Management operating results and cash flows. We have obtained long-term disposal contracts with several waste generators and are actively pursuing additional contracts. While achieving increased sales volumes could result in operating profits, we currently do not believe we will report any significant levels of Waste Management operating profit until we have started to generate revenues sufficient to cover the high fixed costs of operating our disposal facilities. We were awarded a national disposal contract for our Federal LLRW disposal facility in April 2013. The contract is for a period of five years and up to $300 million; however, tasks awarded under the contract to date have been for smaller volume waste streams. We have regularly received small volumes of waste for disposal since the end of the second quarter of 2013 for the Federal LLRW disposal facility, but it may be difficult for us to generate positive operating results until we begin routinely receiving large Federal LLRW streams for disposal. In the latter half of 2013 and into the first quarter of 2014 we have been limited in the volume of waste we can receive for disposal due to the shortage of shipping containers needed to transport LLRW. We have a contract to purchase three additional shipping containers, the first of which has been delivered and is awaiting regulatory approval which we expect to have late in the first quarter of 2014. We expect to receive the other two shipping containers by mid-2014. We believe the receipt of these containers will resolve our transportation issues.

We believe WCS can become a viable, profitable operation; however, we do not know if we will be successful in improving WCS' cash flows. We have in the past, and we may in the future, consider strategic alternatives with respect to WCS. We could report a loss in any such strategic transaction.

General Corporate Items, Interest Expense, Provision for Income Taxes (Benefit), Noncontrolling Interest and Related Party Transactions

Securities Earnings—A significant portion of our interest and dividend income in 2011, 2012 and 2013 relates to the distributions we received from The Amalgamated Sugar Company LLC. We recognized dividend income from the LLC of $25.4 million in each of 2011, 2012 and 2013. Net securities transaction gains in 2012 relate principally to the sale of our shares of TIMET common stock in December 2012, see Note 4 to our Consolidated Financial Statements.

Insurance Recoveries—Insurance recoveries relate to amounts NL received from certain of its former insurance carriers, and relate principally to the recovery of prior lead pigment and asbestos litigation defense costs incurred by NL. We have agreements with four former insurance carriers pursuant to which the carriers reimburse us for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of our future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. Substantially all of the insurance recoveries NL recognized 2011 relate to a new settlement we reached with one of our former insurance carriers in 2011 in which they agreed to reimburse NL for a portion of our past lead pigment litigation defense costs.

While we continue to seek additional insurance recoveries for lead pigment and asbestos litigation matters, we do not know the extent to which we will be successful in obtaining additional reimbursement for either defense costs or indemnity. Any additional insurance recoveries would be recognized when the receipt is probable and the amount is determinable. Substantially all of the insurance recoveries recognized in 2012 and 2013 relate to reimbursement of ongoing litigation defense costs. See Note 17 to our Consolidated Financial Statements.

Other General Corporate Income Items—We recognized an aggregate non-cash gain of $54.6 million related to our purchase of a controlling interest in BMI and Landwell in December 2013, consisting of (i) a gain from the remeasurement of our existing interest in BMI and Landwell to estimated fair value and (ii) a bargain purchase gain related to the additional interest in BMI and Landwell acquired. See Note 3 to our Consolidated Financial Statements. We recognized a $14.7 million gain in 2012 related to third and final closing of settlement agreement associated with certain real property NL formerly owned, see Note 15 to our Consolidated Financial Statements. We recognized a gain of $3.2 million in the fourth quarter of 2012 on the sale of certain excess real property owned by NL.

Corporate Expenses, Net and Other Corporate Expense Items—We recognized a goodwill impairment of $6.4 million during the fourth quarter of 2012, see Note 8 to our Consolidated Financial Statements.

Corporate expenses were 132% higher at $105.3 million in 2013 compared to $45.3 million in 2012. Corporate expenses increased primarily due to higher environmental remediation and related costs and to a lesser extent an increase in litigation and related costs in 2013. Included in corporate expense are:

- litigation and related costs at NL of $10.2 million in 2013 compared to $7.5 million in 2012; and
- environmental remediation and related costs of $69.0 million in 2013 compared to $15.0 million in 2012.

Corporate expenses were 11% higher at $45.3 million in 2012 compared to $40.7 million in 2011. Corporate expenses increased primarily due to higher environmental remediation and related costs in 2012. In addition, we had lower litigation and related costs at NL. Included in corporate expense are:

- litigation and related costs at NL of $7.5 million in 2012 compared to $7.9 million in 2011; and
- environmental remediation and related costs of $15.0 million in 2012 compared to $11.3 million in 2011.

Overall, we currently expect that our net general corporate expenses in 2014 will be lower than in 2013 primarily due to lower expected environmental remediation and related costs.

The level of our litigation and related expenses varies from period to period depending upon, among other things, the number of cases in which we are currently involved, the nature of such cases and the current stage

of such cases (e.g. discovery, pre-trial motions, trial or appeal, if applicable). See Note 17 to our Consolidated Financial Statements. If our current expectations regarding the number of cases in which we expect to be involved during 2014, or the nature of such cases, were to change our corporate expenses could be higher than we currently estimate.

Obligations for environmental remediation and related costs are difficult to assess and estimate, and it is possible that actual costs for environmental remediation and related costs will exceed accrued amounts or that costs will be incurred in the future for sites in which we cannot currently estimate the liability. If these events occur in 2014, our corporate expense could be higher than we currently estimate. In addition, we adjust our accruals for environmental remediation and related costs as further information becomes available to us or as circumstances change. Such further information or changed circumstances could result in an increase or reduction in our accrued environmental remediation and related costs. See Note 17 to our Consolidated Financial Statements.

Loss on Prepayment of Debt and Interest Expense—We recognized an aggregate $8.9 million pre-tax charge, consisting of the write-off of unamortized original issue discount costs and deferred financing costs, in the first and third quarters of 2013 related to the voluntary prepayment of our Chemicals Segment's term loan by $290 million in the first quarter of 2013 and the remaining $100 million in the third quarter of 2013. In June 2012, our Chemicals Segment entered into a new $400 million term loan. Our Chemicals Segment used a portion of the net proceeds of the term loan to redeem the remaining outstanding 6.5% Senior Secured Notes due April 2013 (€279.2 million principal amount outstanding). As a result, we recognized an aggregate $7.2 million pre-tax charge in the second quarter of 2012 related to the early extinguishment of debt, consisting of the call premium paid, interest from the June 14, 2012 indenture discharge date to the July 20, 2012 redemption date and the write-off of unamortized deferred financing costs and original issue discount associated with the redeemed Senior Notes. See Note 9 to our Consolidated Financial Statements.

In March 2011, our Chemicals Segment redeemed €80 million of its 6.5% Senior Secured Notes and borrowed under its European revolving credit facility in order to fund the redemption. In the third and fourth quarters of 2011, our Chemicals Segment repurchased in open market transactions an aggregate €40.8 million principal amount of its Senior Notes. As a result of these redemptions and open market purchases, we recognized a net $3.1 million pre-tax interest charge consisting of the call premium and the write-off of unamortized deferred financing costs and original issue discount associated with the redeemed and repurchased Senior Notes.

Interest expense decreased slightly to $56.1 million in 2013 from $56.3 million in 2012 primarily due to the effects of lower 2013 average debt levels of our Chemicals Segment as a result of the transactions noted above and lower debt balances at our Component Products Segment as it repaid its outstanding promissory note in July 2013. The benefit of these lower debt balances were offset by the refinancing of a Valhi credit facility. During substantially all of 2012, Valhi had a credit facility with borrowings from Kronos, and interest expense associated with Valhi's borrowings from Kronos was eliminated in consolidation. In December 2012, Valhi repaid the Kronos facility with borrowings under a similar facility from Contran. Interest expense on Valhi's credit facility with Contran was approximately $7.3 million in 2013.

Interest expense decreased to $56.3 million in 2012 from $61.8 million in 2011 primarily due to the effects of lower 2012 average debt levels of our Chemicals Segment's Senior Secured Notes resulting from the March 2011 redemption and open market purchases in the third and fourth quarters of 2011. In addition, outstanding debt in 2012 carried lower average interest rates than in 2011. In addition outstanding debt balances were lower at NL and CompX.

We expect interest expense will be higher in 2014 as compared to 2013 due to higher average balances of outstanding borrowings at our Chemicals Segment in 2014 which completed a $350 million debt refinancing in February 2014, see Note 9 to our Consolidated Financial Statements, which will be somewhat offset by lower average interest rates at Kronos and lower debt balances at CompX.

Provision for Income Taxes (Benefit)—We recognized an income tax benefit of $91.0 million in 2013 and income tax expense of $169.9 million in 2011 and $104.8 million in 2012. This difference is primarily due to our decreased earnings in 2013. See Note 12 to our Consolidated Financial Statements for a tabular reconciliation of our statutory tax expense to our actual tax expense. Some of the more significant items impacting this reconciliation are summarized below.

Our income tax provision in 2013 includes an aggregate $11.1 million benefit related to the remeasurement of our deferred income tax liability with respect to our investment in BMI from capital gains rates to dividend received deduction rates, including the deferred income taxes related to (i) the gain from the remeasurement of our existing investment in BMI to estimated fair value and (ii) the bargain purchase gain related to the additional ownership interest in BMI acquired in December 2013. See Notes 3 and 12 to our Consolidated Financial Statements. Our income tax provision in 2012 includes a net incremental tax benefit related to our Chemicals Segment's operations of $3.1 million. We determined during the third quarter that due to global changes in the business we would not remit certain dividends from our non-U.S. jurisdictions. As a result, certain current year tax attributes were available for carryback to offset prior year tax expense and our provision for income taxes in the third quarter included an incremental tax benefit of $11.1 million. During the fourth quarter as a result of a change in circumstances related to our sale and the sale by certain of our affiliates of their shares of TIMET common stock, which sale provided an opportunity for us and other members of our consolidated U.S. federal income tax group to elect to claim foreign tax credits, we determined that we could tax-efficiently remit non-cash dividends from our non-U.S. jurisdictions before the end of the year that absent the TIMET sale would not have been considered. Our provision for income taxes in the fourth quarter of 2012 includes an incremental tax related to the non-cash dividend distributions of $8.0 million.

Our income tax expense in 2011 includes a $17.2 million provision for U.S. incremental income taxes on current earnings repatriated from our German subsidiary primarily incurred in the third and fourth quarters of 2011, which earnings were used to fund a portion of the repurchases of Kronos' Senior Secured Notes. In addition, our income tax expense in 2011 includes a net benefit of $8.5 million (primarily in the third quarter) related to a decrease in the reserve for uncertain tax positions.

Noncontrolling Interest in Net Income (Loss) of Subsidiaries—Noncontrolling interest in continuing operations of subsidiaries decreased from 2013 to 2012 primarily due to decreased operating income at Kronos in 2012. Noncontrolling interest in continuing operations of subsidiaries decreased from 2011 to 2012 primarily due to decreased operating income at Kronos in 2012.

Noncontrolling interest in net income of CompX attributable to discontinued operations (exclusive of the gain on sale of the discontinued operations) was consistent in 2012 compared to 2011. The noncontrolling interest related to the sale of such operations in 2012 was $6.1 million.

Related Party Transactions—We are a party to certain transactions with related parties. See Note 16 to our Consolidated Financial Statements.

Assumptions on Defined Benefit Pension Plans and OPEB Plans.

Defined Benefit Pension Plans — We maintain various defined benefit pension plans in the U.S., Europe and Canada. See Note 11 to our Consolidated Financial Statements. At December 31, 2013, the projected benefit obligations for all defined benefit plans comprised $62.0 million related to U.S. plans and $604.9 million related to foreign plans. Substantially all of the projected benefit obligations attributable to foreign plans related to plans maintained by Kronos, and approximately 72% and 28% of the projected benefit obligations attributable to U.S. plans related to plans maintained by NL and Kronos, respectively.

Under defined benefit pension plan accounting, we recognize defined benefit pension plan expense and prepaid and accrued pension costs based on certain actuarial assumptions, principally the assumed discount rate, the assumed

long-term rate of return on plan assets and the assumed increase in future compensation levels. We recognize the full funded status of our defined benefit pension plans as either an asset (for overfunded plans) or a liability (for underfunded plans) in our Consolidated Balance Sheet.

We recognized consolidated defined benefit pension plan expense of $25.4 million in 2011, $25.1 million in 2012 and $36.2 million in 2013. Included in our 2013 defined benefit plan expense is a curtailment charge of $7.3 million resulting from amendments to one of Kronos' Canadian plans. Certain non-U.S. employees are covered by plans in their respective countries, principally in Germany, Canada and Norway. Participation in the defined benefit pension plan in Germany was closed to new participants effective in 2005. German employees hired beginning in 2005 participate in a new plan in which the retirement benefit is based upon the amount of employee and employer contributions to the plan, but for which in accordance with German law the employer guarantees a minimum rate of return on invested assets and a guaranteed indexed lifetime benefit payment after retirement based on the participant's account balance at the time of retirement. In accordance with GAAP, the new pension plan is accounted for as a defined benefit plan, principally because of such guaranteed minimum rate of return and guaranteed lifetime benefit payment. Participation in the defined benefit plan in Canada with respect to hourly workers was closed to new participants in December 2013, and existing hourly plan participants will no longer accrue additional benefits after December 2013. Our U.S. plan for both NL and Kronos was closed to new participants in 1996, and existing participants no longer accrued any additional benefits after that date. The amount of funding requirements for these defined benefit pension plans is generally based upon applicable regulations (such as ERISA in the U.S.) and will generally differ from pension expense for financial reporting purposes. The amount of funding requirements for these defined benefit pension plans is generally based upon applicable regulations (such as ERISA in the U.S.), and will generally differ from pension expense recognized under GAAP for financial reporting purposes. We made contributions to all of our defined benefit pension plans of $25.9 million in 2011, $30.4 million in 2012 and $28.4 million in 2013.

The discount rates we use for determining defined benefit pension expense and the related pension obligations are based on current interest rates earned on long-term bonds that receive one of the two highest ratings given by recognized rating agencies in the applicable country where the defined benefit pension benefits are being paid. In addition, we receive third-party advice about appropriate discount rates, and these advisors may in some cases use their own market indices. We adjust these discount rates as of each December 31 valuation date to reflect then-current interest rates on such long-term bonds. We use these discount rates to determine the actuarial present value of the pension obligations as of December 31 of that year. We also use these discount rates to determine the interest component of defined benefit pension expense for the following year.

At December 31, 2013, approximately 64%, 19%, 11% and 3% of the projected benefit obligations related to Kronos' plans were in Germany, Canada, Norway and the U.S., respectively. The NL plan is substantially all in the U.S. We use several different discount rate assumptions in determining our consolidated defined benefit pension plan obligations and expense because we maintain defined benefit pension plans in several different countries in North America and Europe and the interest rate environment differs from country to country.

We used the following discount rates for our defined benefit pension plans:

	Discount rates used for:		
	Obligations at December 31, 2011 and expense in 2012	Obligations at December 31, 2012 and expense in 2013	Obligations at December 31, 2013 and expense in 2014
Kronos and NL Plans:			
Germany	5.5%	3.5%	3.5%
Canada	4.3%	3.9%	4.7%
Norway	3.5%	4.3%	4.0%
U.S.	4.2%	3.6%	4.5%

The assumed long-term rate of return on plan assets represents the estimated average rate of earnings expected to be earned on the funds invested or to be invested in the plans' assets provided to fund the benefit payments inherent in the projected benefit obligations. Unlike the discount rate, which is adjusted each year based on changes in current long-term interest rates, the assumed long-term rate of return on plan assets will not necessarily change based upon the actual short-term performance of the plan assets in any given year. Defined benefit pension expense each year is based upon the assumed long-term rate of return on plan assets for each plan, the actual fair value of the plan assets as of the beginning of the year and an estimate of the amount of contributions to and distributions from the plan during the year. Differences between the expected return on plan assets for a given year and the actual return are deferred and amortized over future periods based either upon the expected average remaining service life of the active plan participants (for plans for which benefits are still being earned by active

employees) or the average remaining life expectancy of the inactive participants (for plans for which benefits are not still being earned by active employees).

At December 31, 2013, the fair value of plan assets for all defined benefit plans comprised $54.9 million related to U.S. plans and $441.6 million related to foreign plans. Substantially all of plan assets attributable to foreign plans related to plans maintained by Kronos, and approximately 71% and 29% of the plan assets attributable to U.S. plans related to plans maintained by NL and Kronos, respectively. At December 31, 2013, approximately 55%, 24%, 14% and 3% of the plan assets related to Kronos' plans were in Germany, Canada, Norway and the U.S., respectively. We use several different long-term rates of return on plan asset assumptions in determining our consolidated defined benefit pension plan expense. This is because the plan assets in different countries are invested in a different mix of investments and the long-term rates of return for different investments differ from country to country.

In determining the expected long-term rate of return on plan asset assumptions, we consider the long-term asset mix (e.g. equity vs. fixed income) for the assets for each of our plans and the expected long-term rates of return for such asset components. In addition, we receive third-party advice about appropriate long-term rates of return. Such assumed asset mixes are summarized below:

- Substantially all of the Kronos and NL plan assets in the U.S. are invested in the Combined Master Retirement Trust ("CMRT"), a collective investment trust sponsored by Contran to permit the collective investment by certain master trusts which fund certain employee benefits plans sponsored by Contran and certain of its affiliates. The CMRT's long-term investment objective is to provide a rate of return exceeding a composite of broad market equity and fixed income indices (including the S&P 500 and certain Russell indices) Prior to December 2012, the CMRT had an investment in TIMET common stock; however, on December 20, 2012 the CMRT sold its shares of common stock in conjunction with the tender offer. See Note 15 to our Consolidated Financial Statements. During the history of the CMRT from its inception in 1988 through December 31, 2013, the average annual rate of return has been 14%.
- In Germany, the composition of our plan assets is established to satisfy the requirements of the German insurance commissioner.
- In Canada, we currently have a plan asset target allocation of 45% to equity securities, 48% to fixed income securities, 7% to other investments and the remainder primarily to cash and liquid investments. We expect the long-term rate of return for such investments to average approximately 125 basis points above the applicable equity or fixed income index.
- In Norway, we currently have a plan asset target allocation of 12% to equity securities, 78% to fixed income securities, 9% to real estate and the remainder primarily to cash and liquid investments. The expected long-term rate of return for such investments is approximately 8%, 4%, 6% and 4%, respectively.

Our pension plan weighted average asset allocations by asset category were as follows:

	December 31, 2013							
	Germany		Canada		Norway		CMRT	
Equity securities and limited partnerships	25	%	53	%	11	%	64	%
Fixed income securities	61		41		60		35	
Real estate	10		-		8		-	
Other	4		6		21		1	
Total	100	%	100	%	100	%	100	%

	December 31, 2012							
	Germany		Canada		Norway		CMRT	
Equity securities and limited partnerships	27	%	54	%	13	%	53	%
Fixed income securities	54		38		68		12	

Real estate	10	-	8	-
Other	9	8	11	35

Total	100%	100%	100%	100%

We regularly review our actual asset allocation for each non-US plan and will periodically rebalance the investments in each plan to more accurately reflect the targeted allocation when considered appropriate. The CMRT trustee and investment committee do not maintain a specific target asset allocation in order to achieve their objectives, but instead they periodically change the asset mix of the CMRT based upon, among other things, advice they receive from third-party advisors and their expectations regarding potential returns for various investment alternatives and what asset mix will generate the greatest overall return.

The assumed long-term rates of return on plan assets used for purposes of determining net period pension cost for 2011, 2012 and 2013 were as follows:

	2011	2012	2013
Kronos and NL plans:			
Germany	5.0%	4.8%	4.8%
Canada	6.0%	5.8%	5.8%
Norway	4.8%	4.8%	4.8%
U.S.	10.0%	10.0%	10.0%

We currently expect to use the same long-term rate of return on plan asset assumptions in 2014 as we used in 2013 for purposes of determining the 2014 defined benefit pension plan expense, except for our U.S. plan where we expect to use 7.5% for the reasons discussed in Note 11 to our Consolidated Financial Statements.

To the extent that a plan's particular pension benefit formula calculates the pension benefit in whole or in part based upon future compensation levels, the projected benefit obligations and the pension expense will be based in part upon expected increases in future compensation levels. For all of our plans for which the benefit formula is so calculated, we generally base the assumed expected increase in future compensation levels on the average long-term inflation rates for the applicable country.

In addition to the actuarial assumptions discussed above, because Kronos maintains defined benefit pension plans outside the U.S., the amounts we recognize for defined benefit pension expense and prepaid and accrued pension costs will vary based upon relative changes in currency exchange rates.

As discussed above, assumed discount rates and rates of return on plan assets are re-evaluated annually. A reduction in the assumed discount rate generally results in an actuarial loss, as the actuarially-determined present value of estimated future benefit payments will increase. Conversely, an increase in the assumed discount rate generally results in an actuarial gain. In addition, an actual return on plan assets for a given year that is greater than the assumed return on plan assets results in an actuarial gain, while an actual return on plan assets that is less than the assumed return results in an actuarial loss. Other actual outcomes that differ from previous assumptions, such as individuals living longer or shorter than assumed in mortality tables, which are also used to determine the actuarially-determined present value of estimated future benefit payments, changes in such mortality table themselves or plan amendments, will also result in actuarial losses or gains. These amounts are recognized in other comprehensive income. In addition, any actuarial gains generated in future periods would reduce the negative amortization effect included in earnings of any cumulative unrecognized actuarial losses, while any actuarial losses generated in future periods would reduce the favorable amortization effect included in earnings of any cumulative unrecognized actuarial gains.

During 2013, our defined benefit pension plans generated net actuarial gains of $20.1 million. This actuarial gain resulted primarily from the general increase in discount rates from December 31, 2012 to December 31, 2013, and by an actual return on plan assets during 2013 in excess of the expected return.

Based on the actuarial assumptions described above and our current expectations for what actual average currency exchange rates will be during 2014, we currently expect our aggregate defined benefit pension expense will approximate $22 million in 2014. In comparison, we currently expect to be required to make approximately $27.4 million of aggregate contributions to such plans during 2014.

As noted above, defined benefit pension expense and the amounts recognized as prepaid and accrued pension costs are based upon the actuarial assumptions discussed above. We believe all of the actuarial assumptions used are reasonable and appropriate. If we had lowered the assumed discount rates by 25 basis points for all of their plans as of December 31, 2013, our aggregate projected benefit obligations would have increased by approximately $25 million at that date, and our aggregate defined benefit pension expense would be expected to increase by approximately $1.5 million during 2013. Similarly, if we lowered the assumed long-term rates of return on plan assets by 25 basis points for all of their plans, our defined benefit pension expense would be expected to increase by approximately $1 million during 2013.

OPEB Plans — We provide certain health care and life insurance benefits for certain of our eligible retired employees. See Note 11 to our Consolidated Financial Statements. At December 31, 2013, approximately 54%, 26% and 20% of our aggregate accrued OPEB costs relate to Kronos, NL and Tremont, respectively. Kronos provides such OPEB benefits to eligible retirees in the U.S. and Canada, and NL and Tremont provide such OPEB benefits to eligible retirees in the U.S. Under accounting for other postretirement employee benefits, OPEB expense and accrued OPEB costs are based on certain actuarial assumptions, principally the assumed discount rate and the assumed rate of increases in future health care costs. We recognize the full unfunded status of our OPEB plans as a liability.

We recognized consolidated OPEB credit of $1.1 million in 2011, $.7 million in 2012 and $1.4 million in 2013. Included in our 2013 OPEB cost is a curtailment gain of $.6 million resulting from amendments to Kronos' Canadian plan. Similar to defined benefit pension benefits, the amount of funding will differ from the expense recognized for financial reporting purposes, and contributions to the plans to cover benefit payments aggregated $1.2 million in each of 2011 and 2012 and $1.1 million in 2013. Substantially all of our U.S. accrued OPEB cost relates to benefits being paid to current retirees and their dependents and no material amount of OPEB benefits are being earned by current U.S. employees. Some of Kronos' Canadian employees are earning OPEB benefits. Our expected OPEB benefit payments for 2014 are expected to be similar to 2013.

The discount rates we use for determining OPEB expense and the related OPEB obligations are based on current interest rates earned on high-quality bond yields in the applicable country where the benefits are being paid. In addition, we receive third-party advice about appropriate discount rates, and these advisors may in some cases use their own market indices. We adjust these discount rates as of each valuation date to reflect then-current interest rates on such bonds. We use these discount rates to determine the actuarial present value of the OPEB obligations as of December 31 of that year. We also use these discount rates to determine the interest component of OPEB expense for the following year.

In estimating the health care cost trend rate, we consider our actual health care cost experience, future benefit structures, industry trends and advice from third-party actuaries. In certain cases, NL has the right to pass on to retirees all or a portion of any increases in health care costs; for these retirees, any future increase in health care costs will have no effect on the amount of OPEB expense and accrued OPEB costs we recognize. During each of the past three years, we have assumed that the relative increase in health care costs will generally trend downward over the next several years, reflecting, among other things, assumed increases in efficiency in the health care system and industry-wide cost and plan-design cost containment initiatives. For example, at December 31, 2013, the expected rate of increase in future health care costs range is 7% in 2014, declining to a rate of 5% in 2020 and thereafter.

Based on the actuarial assumptions described above and Kronos' current expectation for what actual average foreign currency exchange rates will be during 2014, we expect our consolidated OPEB credit will approximate $1.5 million in 2014. In comparison, we expect to be required to make approximately $1.5 million of contributions to such plans during 2014.

As noted above, OPEB credit and the amount we recognize as accrued OPEB costs are based upon the actuarial assumptions discussed above. We believe all of the actuarial assumptions we use are reasonable and appropriate. However, if we had lowered the assumed discount rate by 25 basis points for all plans as of December 31, 2013, our

aggregate projected benefit obligations would have increased by approximately $.3 million at that date and our OPEB cost would be expected to remain consistent with the 2013 costs. If we assumed a one percent change in assumed health care trend rates for all plans, our assumed projected benefit obligation would have increased by approximately $.3 million and our OPEB costs would be expected to remain consistent with the 2013 costs.

Foreign Operations

We have substantial operations located outside the United States, principally Chemicals operations in Europe and Canada. The functional currency of these operations is the local currency. As a result, the reported amount of our assets and liabilities related to these foreign operations will fluctuate based upon changes in currency exchange rates.

LIQUIDITY AND CAPITAL RESOURCES

Consolidated Cash Flows

Operating Activities—

Trends in cash flows from operating activities (excluding the impact of significant asset dispositions and relative changes in assets and liabilities) are generally similar to trends in our operating income.

Cash flows from operating activities increased from $71.9 million in 2012 to $117.1 million in 2013. This $45.2 million increase in cash provided by operations was primarily due to the net effects of the following items:

- lower consolidated operating income in 2013 of $484.1 million compared to 2012;
- higher net distributions from our TiO_2 joint venture in 2013 of $31.6 million, due to the timing of the joint venture's working capital needs;
- lower net cash paid for income taxes in 2013 of $55.4 million resulting from our decreased profitability;
- lower cash paid for interest in 2013 of $10.5 million, primarily due primarily due to lower debt levels in 2013, and to financing costs incurred in 2012 associated with Kronos' new term loan and a $6.2 million call premium paid upon redemption of Kronos' Senior Secured Notes;
- the $7.4 million income from operations in 2012 attributable to CompX's disposed operations; and
- changes in receivables, inventories, payables and accrued liabilities in 2013 provided $293.6 million of net cash in 2013, an increase in the amount of cash provided of $589.8 million compared to 2012, primarily due to the relative changes in our inventories, receivables, prepaids, payables and accruals primarily due to the relative decrease in our inventories, as discussed below.

Cash flows from operating activities decreased from $292.4 million in 2011 to $71.9 million in 2012. This $220.5 million decrease in cash provided by operations was primarily due to the net effects of the following items:

- lower consolidated operating income in 2012 of $176.0 million compared to 2011;
- higher net contributions to our TiO_2 manufacturing joint venture in 2012 of $24.5 million, primarily to support the joint venture's higher working capital needs associated with higher-cost feedstock ore; and
- lower cash received from insurance recoveries in 2012 of $13.0 million; and
- changes in receivables, inventories, payables and accrued liabilities in 2012 used $162.2 million of net cash in 2012, a decrease in the amount of cash used of $3.3 million compared to 2012, primarily due to the benefit from payables and accruals and the improvement in receivables, as discussed below.

Changes in working capital were affected by accounts receivable and inventory changes. As shown below:

- Kronos' average days sales outstanding ("DSO") increased slightly from December 31, 2012 to December 31, 2013 as a result of lower average daily net sales resulting from lower average selling prices partially offset by higher sales volumes.

- Kronos' average days sales in inventory ("DSI") decreased from December 31, 2012 to December 31, 2013 due to lower inventory raw material costs and lower inventory volumes in 2013.
- CompX's average DSO decreased from December 31, 2012 to December 31, 2013 as a result of the timing of sales and collections in the last month of 2013 as compared to 2012.
- CompX's average DSI increased from December 31, 2012 to December 31, 2013 as a result of the increase in marine components reporting unit average number of days in inventory relating to a more intentional buildup of inventory in 2013 in advance of the 2014 boating season.

For comparative purposes, we have also provided comparable prior year numbers below.

	December 31, 2011	December 31, 2012	December 31, 2013
Kronos:			
Days sales outstanding	55 days	61 days	62 days
Days sales in inventory	104 days	102 days	75 days
CompX:			
Days sales outstanding*	39 days	40 days	35 days
Days sales in inventory*	71 days	71 days	76 days

*Includes discontinued operations in 2011, see Note 3 to our Consolidated Financial Statements.

We do not have complete access to the cash flows of our majority-owned subsidiaries, due in part to limitations contained in certain credit agreements of our subsidiaries and because we do not own 100% of these subsidiaries. A detail of our consolidated cash flows from operating activities is presented in the table below. Intercompany dividends have been eliminated.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Cash provided by (used in) operating activities:			
Kronos	$295.4	$76.6	$130.1
Valhi exclusive of subsidiaries	106.4	69.2	60.8
CompX*	16.0	13.6	(4.1)
NL exclusive of subsidiaries	35.4	6.8	19.1
Waste Control Specialists	(32.9)	(11.5)	(7.6)
Tremont	(1.8)	—	(1.5)
Other	(.2)	(.5)	(.6)
Eliminations	(125.9)	(82.3)	(79.1)
Total	$292.4	$71.9	$117.1

*Includes discontinued operations in 2011 and 2012, see Note 3 to our Consolidated Financial Statements.

Investing Activities—

We disclose capital expenditures by our business segments in Note 2 to our Consolidated Financial Statements.

We had the following investing activities during 2013:

- we paid $5.3 in cash (plus we issued a promissory note and a deferred payment obligation) to purchase additional interest in BMI and Landwell in December 2013. These businesses had $27.4 million in cash and cash equivalents at the December 31, 2013 acquisition date, see Note 3 to our Consolidated Financial Statements

· we collected $3.0 million in principal payments on a note receivable;
· we received $1.6 million in net proceeds on the sale of an asset held for sale; and

- we made required payments of $11.4 million to certain collateral trusts for WCS; and
- received net proceeds from the sales and purchases of all other marketable securities of $3.2 million in market transactions.

We had the following market transactions during 2012:

- sold all of our TIMET common stock for $107.6 million;
- proceeds from the sale of mutual funds of $21.1 million; and
- received net proceeds from the sale of all other marketable securities of $.7 million.

Also during 2012 NL received $15.6 million in the second quarter of 2012 related to third and final closing of settlement agreement associated with certain real property NL formerly owned, see Note 15 to our Consolidated Financial Statements. We received the $58.0 million from the sale of CompX's furniture components reporting unit, see Note 3 to our Consolidated Financial Statements, and Contran repaid a net $11.2 million in loans to us, see Note 16 to our Consolidated Financial Statement.

We had the following market transactions during 2011:

- purchases of TIMET common stock for $30.4 million, including late 2011 trades settled in 2011; and
- net purchases of mutual funds and other marketable securities of $23.7 million.

Also during 2011, we received the $15.0 million principal amount due under our promissory note receivable, we made $11.2 million in loans to Contran and we acquired an ergonomic component products business for $4.8 million.

Financing Activities –

During 2013, we:

- voluntarily prepaid $390.0 million principal amount of Kronos' term loan;
- borrowed $190.0 million under Kronos' new note payable to Contran, and subsequently repaid $20.0 million;
- borrowed $162.1 million and subsequently repaid $151.0 million under Kronos' North American credit facility;
- borrowed €10 million ($12.8 million when borrowed) on Kronos' European credit facility and subsequently repaid €20 million ($26.5 million when repaid);
- borrowed $1.7 million from a Canadian economic development agency;
- prepaid $18.5 million remaining principal amount under CompX's promissory note payable to Timet Finance Management Company;
- borrowed a net $48.9 million on Valhi's credit facility with Contran; and
- Kronos repurchased 49,000 shares of its common stock in open market transactions for $.7 million.

During 2012, we:

- borrowed €80 million ($107.4 million when borrowed) on Kronos' European credit facility and subsequently repaid an aggregate of €70million ($88.6 million when repaid);
- borrowed an aggregate $394 million on Kronos' new term loan entered into in June 2012 that was issued at 98.5% of the principal amount and subsequently repaid $10.0 million principal amount;
- retired all of the remaining €279.2 million principal amount of Kronos' 6.5% Senior Secured Notes ($352.3 million when retired);

- borrowed and subsequently repaid $71 million on Kronos' revolving North American credit facility;
- borrowed $157.6 million on our Contran credit facility;
- prepaid $2.8 million on CompX's promissory note payable to TIMET in addition to its regular quarterly payments aggregating $3.8 million; and
- CompX repaid $2.0 million that was outstanding under its credit facility at December 31, 2012 and subsequently cancelled the facility.

During 2011, we:

- redeemed €80 million principal amount of Kronos' €400 million 6.5% Senior Secured Notes at 102.17% of the face value for an aggregate of $115.7 million, including a $2.5 million call premium in March 2011;
- borrowed €80 million ($113.3 million when borrowed) under Kronos' European credit facility in order to fund the €80 million redemption of our Senior Secured Notes and subsequently repaid €80 million ($115.0 million when repaid);
- repurchased €40.8 million principal amount of Kronos' 6.5% Senior Secured Notes in open market transactions for an aggregate of €40.6 million ($57.6 million when repurchased);
- repaid $3.0 million that was outstanding under CompX's credit facility at December 31, 2010 and subsequently borrowed Cdn. $5.0 million ($5.3 million when borrowed) in connection with CompX's acquisition of an ergonomics products business and then repaid Cdn. $2.0 million ($2.9 million when repaid) during 2011; and
- repaid $20 million in principal payments on CompX's promissory note payable to TIMET.

We paid aggregate cash dividends on our common stock of $53.7 million in 2011, $65.0 million in 2012, and $67.9 million in 2013 ($.033 per share in the first quarter of 2011; $.042 per share in the second, third and fourth quarters of 2011 and the first quarter of 2012 and $.05 per share in the second, third and fourth quarters of 2012 and each quarter of 2013). Distributions to noncontrolling interest in 2011, 2012 and 2013 are primarily comprised of NL dividends paid to shareholders other than us; CompX dividends paid to shareholders other than NL; and Kronos cash dividends paid to shareholders other than us and NL.

Kronos purchased 1.4 million shares of our common stock in 2011 for an aggregate purchase price of $12.6 million. These shares of our stock owned by NL and Kronos are included in our treasury stock balance since pursuant to Delaware law they cannot be voted. Other cash flows from financing activities in 2011, 2012 and 2013 relate principally to shares of common stock issued by us and our subsidiaries upon the exercise of stock options or the issuance of shares to directors.

Outstanding Debt Obligations

At December 31, 2013, our consolidated indebtedness was comprised of:

- Valhi's $250 million loan from Snake River Sugar Company due in January 2027;
- Valhi's $206.5 million outstanding on its $275 million credit facility with Contran which is due no earlier than December 31, 2015;
- $170.0 million under Kronos' note payable to Contran due in June 2018;
- $11.1 million under Kronos' North American credit facility which matures in June 2017;
- WCS' financing capital lease with Andrews County, Texas ($68.6 million outstanding) which has an effective interest rate of 7.0% and is due in monthly installments through August 2035;
- Tremont's $19.1 million promissory note payable due in December 2023;
- WCS' 6.0% promissory note ($2.4 million outstanding) due in December 2014;

·$11.2 million on BMI's bank note payable, due in January 2025;
·$3.1 million on Landwell's note payable to the City of Henderson due in October 2020; and
·approximately $10.5 million of other indebtedness, primarily capital lease obligations.

In February 2014, Kronos entered into a new $350 million term loan. We used $170 million of the net proceeds of this new term loan to prepay the outstanding principal balance of its note payable to Contran (along with accrued and unpaid interest through the prepayment date) and the note payable was cancelled. The remaining $172.8 million net proceeds are available for Kronos' general corporate purposes. See Note 9 to our Consolidated Financial Statements.

Kronos' Canadian subsidiary has a Cdn. $10.0 million loan agreement for the limited purpose of issuing letters of credit. The facility contains certain restrictive covenants which, among other things, restrict the subsidiary from incurring additional indebtedness in excess of Cdn. $35 million. At December 31, 2013 an aggregate of Cdn. $7.9 million letters of credit were outstanding under this facility.

Certain of our credit facilities require the respective borrowers to maintain minimum levels of equity, require the maintenance of certain financial ratios, limit dividends and additional indebtedness and contain other provisions and restrictive covenants customary in lending transactions of this type. Certain of our credit agreements contain provisions which could result in the acceleration of indebtedness prior to their stated maturity for reasons other than defaults for failure to comply with typical financial or payment covenants. For example, certain credit agreements allow the lender to accelerate the maturity of the indebtedness upon a change of control (as defined in the agreement) of the borrower. In addition, certain credit agreements could result in the acceleration of all or a portion of the indebtedness following a sale of assets outside the ordinary course of business. Kronos' North American and European revolvers and its new term loan contain a number of covenants and restrictions which, among other things, restrict its ability to incur additional debt, incur liens, pay dividends or merge or consolidate with, or sell or transfer substantially all of our assets to, another entity, and contains other provisions and restrictive covenants customary in lending transactions of this type. Kronos' European revolving credit facility also requires the maintenance of certain financial ratios. At both September 30, 2013 and December 31, 2013, and based on the current earnings before income tax, interest, depreciation and amortization expense (EBITDA) of the borrowers, Kronos would not have met the financial test under the European revolver if the borrowers had any net debt outstanding at such dates. In December 2013, the lenders under its European revolving credit facility granted a waiver until June 30, 2014 with respect to the financial test, but Kronos' ability to borrow any amounts under the facility is subject to the requirement that the borrowers maintain a specified level of EBITDA. We are in compliance with all of our debt covenants at December 31, 2013, as amended by the waiver with respect to Kronos' European revolving credit facility discussed above. We believe we will be able to continue to comply with the financial covenants contained in our credit facilities through their maturity, including the requirement to maintain a specified level of EBITDA with respect to Kronos' European revolving credit facility consistent with the waiver; however if future operating results differ materially from our expectations we may be unable to maintain compliance. We believe we have alternate sources of liquidity, including cash on hand and borrowings under Kronos North American revolver and Valhi's Contran credit facility, (which do not contain any financial maintenance covenants) in order to adequately address any compliance issues which might arise. See Note 9 to our Consolidated Financial Statements.

Future Cash Requirements

Liquidity—

Our primary source of liquidity on an ongoing basis is our cash flows from operating activities and borrowings under various lines of credit and notes. We generally use these amounts to (i) fund capital expenditures, (ii) repay short-term indebtedness incurred primarily for working capital purposes and (iii) provide for the payment of dividends (including dividends paid to us by our subsidiaries) or treasury stock purchases. From time-to-time we will incur indebtedness, generally to (i) fund short-term working capital needs, (ii) refinance existing indebtedness, (iii) make investments in marketable and other securities (including the acquisition of securities issued by our subsidiaries and affiliates) or (iv) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business.

Occasionally we sell assets outside the ordinary course of business, and we generally use the proceeds to (i) repay existing indebtedness (including indebtedness which may have been collateralized by

the assets sold), (ii) make investments in marketable and other securities, (iii) fund major capital expenditures or the acquisition of other assets outside the ordinary course of business or (iv) pay dividends.

We routinely compare our liquidity requirements and alternative uses of capital against the estimated future cash flows we expect to receive from our subsidiaries, and the estimated sales value of those units. As a result of this process, we have in the past sought, and may in the future seek, to raise additional capital, refinance or restructure indebtedness, repurchase indebtedness in the market or otherwise, modify our dividend policies, consider the sale of our interests in our subsidiaries, affiliates, business units, marketable securities or other assets, or take a combination of these and other steps, to increase liquidity, reduce indebtedness and fund future activities. Such activities have in the past and may in the future involve related companies. From time to time we and our subsidiaries may enter into intercompany loans as a cash management tool. Such notes are structured as revolving demand notes and pay and receive interest on terms we believe are more favorable than current debt and investment market rates. The companies that borrow under these notes have sufficient borrowing capacity to repay the notes at anytime upon demand. All of these notes and related interest expense and income are eliminated in our Consolidated Financial Statements.

We periodically evaluate acquisitions of interests in or combinations with companies (including our affiliates) that may or may not be engaged in businesses related to our current businesses. We intend to consider such acquisition activities in the future and, in connection with this activity, may consider issuing additional equity securities and increasing indebtedness. From time to time, we also evaluate the restructuring of ownership interests among our respective subsidiaries and related companies.

We believe we will be able to comply with the financial covenants contained in our credit facilities through their maturities; however, if future operating results differ materially from our expectations we may be unable to maintain compliance. Based upon our expectations of our operating performance, and the anticipated demands on our cash resources, we expect to have sufficient liquidity to meet our short-term (defined as the twelve-month period ending December 31, 2014) and long-term obligations (defined as the five-year period ending December 31, 2018). In this regard, see the discussion above in “Outstanding Debt Obligations.” If actual developments differ from our expectations, our liquidity could be adversely affected.

At December 31, 2013, we had credit available under existing facilities of $240.4 million, which was comprised of:

- $82.8[(1)] million under Kronos’ European revolving credit facility;
- $89.1 million under Kronos North American revolving credit facility; and
- $68.5[(2)] million under Valhi’s Contran credit facility.

[(1)] Effective January 1, 2014, and in accordance with the terms of Kronos’ waiver, our borrowing availability under this facility increased to $124.1 million.
[(2)] Amounts available under this facility are at the sole discretion of Contran.

At December 31, 2013, we had an aggregate of $193.5 million of restricted and unrestricted cash, cash equivalents and marketable securities. A detail by entity is presented in the table below.

	Total Amount (In millions)	Held outside U.S.
Kronos	$63.9	$ 63.2
CompX	38.8	—
NL exclusive of its subsidiaries	18.9	—
WCS	27.7	—

Tremont	8.7	—
BMI	14.7	—
Landwell	20.5	—
Valhi exclusive of its subsidiaries	.3	—
Total cash and cash equivalents, restricted cash and marketable securities	$193.5	$ 63.2

Capital Expenditures and other investments—

We currently expect our aggregate capital expenditures for 2014 will be approximately $81 million as follows:

- $68 million by our Chemicals Segment, including approximately $14 million in the area of environmental compliance, protection and improvement;
- $7 million by our Waste Management Segment including approximately $.5 million in capitalized operating permit costs,;
- $3 million by our Component Products Segment; and
- $3 million by our BMI and Landwell.

The WCS amount includes approximately $.5 million in capitalized operating permit costs. In addition:

- WCS expects to commence payments under capital leases in 2014 for the purchase of 3 casks and related trailers totaling approximately $9.1 million, $1.0 million of which is expected to be paid during 2014; and
- Landwell expects to spend approximately $26 million on land development costs during 2014.

Capital spending for 2014 is expected to be funded through cash generated from operations and credit facilities. Planned capital expenditures in 2014 at Kronos and CompX will primarily be to maintain and improve the cost-effectiveness of our facilities. In addition, Kronos' capital expenditures in the area of environmental compliance, protection and improvement include expenditures which are primarily focused on increased operating efficiency but also result in improved environmental protection, such as lower emissions from our manufacturing plants.

Repurchases of our Common Stock and Common Stock of Our Subsidiaries—

We have in the past, and may in the future, make repurchases of our common stock in market or privately-negotiated transactions. At December 31, 2013 we had approximately 4.0 million shares available for repurchase of our common stock under the authorizations described in Note 14 to our Consolidated Financial Statements.

Prior to 2011, Kronos' board of directors authorized the repurchase of up to 2.0 million shares of its common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. Kronos may repurchase its common stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, Kronos may terminate the program prior to its completion. Kronos will use cash on hand to acquire the shares. Repurchased shares will be added to Kronos' treasury and cancelled. In the third quarter of 2013 Kronos repurchased approximately 49,000 shares for an aggregate of $.7 million under its repurchase program. The third quarter purchases are the only purchases Kronos has made to date under the plan and at December 31, 2013 approximately 1.95 million shares are available for repurchase.

Prior to 2011, CompX's board of directors authorized various repurchases of its Class A common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. CompX may repurchase its common stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, CompX may terminate the program prior to its completion. CompX will generally use cash on hand to acquire the shares. Repurchased shares will be added to CompX's treasury and cancelled. CompX did not make any repurchases under the plan during 2011, 2012 and 2013, and at December 31, 2013 approximately 678,000 shares were available for purchase under these authorizations.

Dividends—

Because our operations are conducted primarily through subsidiaries and affiliates, our long-term ability to meet parent company level corporate obligations is largely dependent on the receipt of dividends or other distributions from our subsidiaries and affiliates. If Kronos pays its regular dividend of $.15 per share in each quarter of 2014, based on the 58.0 million shares we held of Kronos common stock at December 31, 2013, we would receive aggregate annual regular dividends from Kronos of $34.8 million. During 2013 NL's paid a quarterly cash dividend of $.125 per share. We received aggregate annual dividends from NL of $20.2 million in 2013 based on the 40.4 million shares we held of NL common stock during 2013. In February 2014, NL's Board of Directors deferred consideration of a first quarter 2014 cash dividend and we do not know if we will receive additional cash dividends from NL in the near future. We did not receive any distributions from WCS during 2013, and we do not expect to receive any distributions from WCS during 2014. We expect that our newest consolidated subsidiaries BMI and Landwell, which we acquired a controlling interest in during December 2013, will pay cash dividends but the timing and amount of such dividends is uncertain. All of our ownership interest in CompX is held through our ownership in NL, as such we do not receive any dividends from CompX. Instead any dividend CompX declares is paid to NL.

Our subsidiaries have various credit agreements with unrelated third-party lenders which contain customary limitations on the payment of dividends, typically a percentage of net income or cash flow; however, these restrictions in the past have not significantly impacted their ability to pay dividends.

Investment in our Subsidiaries and Affiliates and Other Acquisitions—

We have in the past, and may in the future, purchase the securities of our subsidiaries and affiliates or third parties in market or privately-negotiated transactions. We base our purchase decision on a variety of factors, including an analysis of the optimal use of our capital, taking into account the market value of the securities and the relative value of expected returns on alternative investments. In connection with these activities, we may consider issuing additional equity securities or increasing our indebtedness. We may also evaluate the restructuring of ownership interests of our businesses among our subsidiaries and related companies.

We generally do not guarantee any indebtedness or other obligations of our subsidiaries or affiliates. Our subsidiaries are not required to pay us dividends. If one or more of our subsidiaries were unable to maintain its current level of dividends, either due to restrictions contained in a credit agreement or to satisfy its liabilities or otherwise, our ability to service our liabilities or to pay dividends on our common stock could be adversely impacted. If this were to occur, we might consider reducing or eliminating our dividends or selling interests in subsidiaries or other assets. If we were required to liquidate assets to generate funds to satisfy our liabilities, we might be required to sell at what we believe would be less than the value of such assets.

WCS' primary source of liquidity currently consists of intercompany borrowings from one of our wholly-owned subsidiaries under the terms of a revolving credit facility. We eliminate these intercompany borrowings in our Consolidated Financial Statements. Over the last three years, WCS had borrowed an aggregate $172.4 million from our subsidiary, which we subsequently contributed to WCS's capital. It is possible WCS will borrow additional amounts from our subsidiary during 2014 under the terms of the revolving credit facility. As amended, WCS can borrow up to $40 million under this facility, which matures in March 2015.

We have an unsecured revolving demand promissory note with NL whereby, as amended, we agreed to loan NL up to $40 million. We also eliminate any such intercompany borrowings in our Consolidated Financial Statements. We had no loans to NL during 2013 under this facility, which as amended is due on demand, but in any event no earlier than March 31, 2015 and no later than December 31, 2015. Our obligation to loan NL money under this note is at our discretion.

We have an unsecured revolving demand promissory note with Kronos which, as amended, provides for borrowings from Kronos of up to $100 million. We also eliminate any such intercompany borrowings in our Consolidated Financial Statements. We had no borrowings from Kronos during 2013 under this facility, which as amended is due

on demand, but in any event no earlier than December 31, 2015. Kronos' obligation to loan us money under this note is at Kronos' discretion.

Investment in The Amalgamated Sugar Company LLC—

The terms of The Amalgamated Sugar Company LLC Company Agreement provide for an annual "base level" of cash dividend distributions (sometimes referred to as distributable cash) by the LLC of $26.7 million, from which we are entitled to a 95% preferential share. Distributions from the LLC are dependent, in part, upon the operations of the LLC. We record dividend distributions from the LLC as income when they are declared by the LLC, which is generally the same month in which we receive the distributions, although distributions may in certain cases be paid on the first business day of the following month. To the extent the LLC's distributable cash is below this base level in any given year, we are entitled to an additional 95% preferential share of any future annual LLC distributable cash in excess of the base level until such shortfall is recovered. Based on the LLC's current projections for 2014, we expect distributions received from the LLC in 2014 will exceed our debt service requirements under our $250 million loans from Snake River Sugar Company by approximately $1.8 million.

We may, at our option, require the LLC to redeem our interest in the LLC, and the LLC has the right to redeem our interest in the LLC beginning in 2027. The redemption price is generally $250 million plus the amount of certain undistributed income allocable to us, if any. In the event we require the LLC to redeem our interest in the LLC, Snake River has the right to accelerate the maturity of and call our $250 aggregate million loans from Snake River. Redemption of our interest in the LLC would result in us reporting income related to the disposition of our LLC interest for income tax purposes, although we would not be expected to report a gain in earnings for financial reporting purposes at the time our LLC interest is redeemed. However, because of Snake River's ability to call our $250 million loans from Snake River upon redemption of our interest in the LLC, the net cash proceeds (after repayment of the debt) generated by the redemption of our interest in the LLC could be less than the income taxes that we would be required to pay as a result of the disposition.

Off-balance Sheet Financing

We do not have any off-balance sheet financing agreements other than the operating leases discussed in Note 17 to our Consolidated Financial Statements.

Commitments and Contingencies

We are subject to certain commitments and contingencies, as more fully described in the Notes to our Consolidated Financial Statements and in this Management's Discussion and Analysis of Financial Condition and Results of Operations, including:

- certain income tax examinations which are underway in various U.S. and non-U.S. jurisdictions;
- certain environmental remediation matters involving NL, Tremont, BMI and Valhi;
- certain litigation related to NL's former involvement in the manufacture of lead pigment and lead-based paint; and
- certain other litigation to which we are a party.

In addition to those legal proceedings described in Note 17 to our Consolidated Financial Statements, various legislation and administrative regulations have, from time to time, been proposed that seek to (i) impose various obligations on present and former manufacturers of lead pigment and lead-based paint (including NL) with respect to asserted health concerns associated with the use of such products and (ii) effectively overturn court decisions in which NL and other pigment manufacturers have been successful. Examples of such proposed legislation include bills which would permit civil liability for damages on the basis of market share, rather than requiring plaintiffs to prove that the defendant's product caused the alleged damage, and bills which would revive actions barred by the statute of limitations. While no legislation or regulations have been enacted to date that are expected to have a material adverse effect on our consolidated financial position, results of operations or liquidity, enactment of such legislation could have such an effect.

As more fully described in the Notes 9 and 17 to our Consolidated Financial Statements, we are a party to various debt, lease and other agreements which contractually and unconditionally commit us to pay certain amounts in the future. Our obligations related to the long-term supply contracts for the purchase of TiO_2 feedstock are more fully

described in Note 17 to our Consolidated Financial Statements and above in "Business—Chemicals Segment—Kronos Worldwide, Inc. —Manufacturing, Operations and Properties." The following table summarizes our contractual commitments as of December 31, 2013 by the type and date of payment.

	Payment due date				
Contractual commitment	2014	2015/ 2016	2017/ 2018	2019 and after	Total
Indebtedness[1]:					
Principal	$15.4	$232.4	$33.6	$535.4	$816.8
Interest payments	50.7	88.3	69.3	236.0	444.3
Operating leases[2]	12.5	15.5	6.8	23.4	58.2
Kronos' long-term supply contracts for the purchase of TiO_2 feedstock[3]	315.2	505.0	—	—	820.2
Kronos' long-term service and other supply contracts[4]	64.7	27.6	14.2	16.9	123.4
Kronos' litigation settlement[5]	35.0	—	—	—	35.0
CompX raw material and other purchase commitments[6]	16.3	—	—	—	16.3
WCS collateral trust[7]	12.2	27.0	74.7	5.8	119.7
Fixed asset acquisitions[2]	16.9	2.2	1.4	4.5	25.0
BMI and Landwell purchase commitments[8]	12.2	—	—	—	12.2
Deferred payment obligation[9]	—	—	—	11.1	11.1
Estimated tax obligations[10]	13.2	—	—	—	13.2
Other	1.0	2.0	—	—	3.0
Total	565.3	900.0	200.0	833.1	2,498.4
Adjustment for effect of new term loan:					
Repayment of Contran note payable:[11]					
Principal	(2.6)	(7.0)	(7.0)	(153.4)	(170.0)
Interest payments	(10.8)	(24.2)	(23.1)	(12.6)	(70.7)
New term loan issued in February 2014:[11]					
Principal	2.6	7.0	7.0	333.4	350.0
Interest payments	14.3	32.7	32.0	17.9	96.9
Adjusted commitments	$568.8	$908.5	$208.9	$1,018.4	$2,704.6

(1) The amount shown for indebtedness involving revolving credit facilities is based upon the actual amount outstanding at December 31, 2013, and the amount shown for interest for any outstanding variable-rate indebtedness is based upon the December 31, 2013 interest rate and assumes that such variable-rate indebtedness remains outstanding until the maturity of the facility. See Item 7A— "Quantitative and Qualitative Disclosures About Market Risk" and Note 9 to our Consolidated Financial Statements.

(2) The timing and amount shown for our operating leases and fixed asset acquisitions are based upon the contractual payment amount and the contractual payment date for such commitments.

(3) Our contracts for the purchase of TiO_2 feedstock contain fixed quantities that Kronos is required to purchase, or specify a range of quantities within which we are required to purchase based on our feedstock requirements. The pricing under these agreements is generally negotiated quarterly. The timing and amount shown for our commitments related to the supply contracts for TiO_2 feedstock are based upon our current estimate of the quantity of material that will be purchased in each time period shown, the payment that would be due based upon such estimated purchased quantity and an estimate of the prices for the various suppliers which is primarily based on first quarter 2014 pricing. The actual amount of material purchased and the actual amount that would be payable by us, may vary from such estimated amounts. Our obligation for the purchase of TiO_2 feedstock is more fully described in Note 17 to our Consolidated Financial Statements and above in "Business—raw materials." The amounts

shown in the table above include the feedstock ore requirements from contracts we entered into in January 2014.

(4) The amounts shown for the long-term service and other supply contracts primarily pertain to agreements Kronos entered into with various providers of products or services which help to run its plant facilities (electricity, natural gas, etc.), utilizing December 31, 2013 exchange rates. See Note 17 to our Consolidated Financial Statements.

(5) The accrued litigation settlement is described in Note 17 to our Consolidated Financial Statements.

(6) CompX's purchase obligations consist of all open purchase orders and contractual obligations (primarily commitments to purchase raw materials) and are based on the contractual payment amount and the contractual payment date for those commitments.
(7) The funding requirements for WCS collateral trust agreements are described in Note 17 to our Consolidated Financial Statements.
(8) BMI and Landwell's purchase obligations consist of contractual obligations (primarily commitments for land development and improvement costs) and are based on the contractual payment amount and the contractual payment date for those commitments.
(9) The deferred payment obligation is described in Note 3 to our Consolidated Financial Statements.
(10) The amount shown for income taxes is the amount of our consolidated income taxes currently payable at December 31, 2013, which is assumed to be paid during 2014 and includes taxes payable to Contran as a result of our being a member of the Contran Tax Group, see Note 1 to our Consolidated Financial Statements.
(11) The terms of our new term loan and the application of the net proceeds are discussed in Note 9 to our Consolidated Financial Statements.

The table above does not include:

- Our obligations under the Louisiana Pigment Company, L.P. joint venture, as the timing and amount of such purchases are unknown and dependent on, among other things, the amount of TiO_2 produced by the joint venture in the future, and the joint venture's future cost of producing such TiO_2. However, the table of contractual commitments does include amounts related to our share of the joint venture's ore requirements necessary for it to produce TiO_2 for us. See Notes 7 and 17 to our Consolidated Financial Statements and "Business—Chemicals—Kronos Worldwide, Inc."
- Amounts we might pay to fund our defined benefit pension plans and OPEB plans, as the timing and amount of any such future fundings are unknown and dependent on, among other things, the future performance of defined benefit pension plan assets, interest rate assumptions and actual future retiree medical costs. Our defined benefit pension plans and OPEB plans are discussed in greater detail in Note 11 to our Consolidated Financial Statements. We currently expect we will be required to contribute an aggregate of $28.9 million to our defined benefit pension and OPEB plans during 2014.
- Any amounts that we might pay to settle any of our uncertain tax positions, as the timing and amount of any such future settlements are unknown and dependent on, among other things, the timing of tax audits. See Note 12 to our Consolidated Financial Statements.

We occasionally enter into raw material supply arrangements to mitigate the short-term impact of future increases in raw material costs. While these arrangements do not necessarily commit us to a minimum volume of purchase, they generally provide for stated unit prices based upon achievement of specified volume purchase levels. This allows us to stabilize raw material purchase prices to a certain extent, provided the specified minimum monthly purchase quantities are met.

Recent Accounting Pronouncements

Not applicable.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

General—We are exposed to market risk from changes in interest rates, currency exchange rates, raw materials and equity security prices.

Interest Rates—We are exposed to market risk from changes in interest rates, primarily related to our indebtedness.

At December 31, 2013 our aggregate indebtedness was split between 47% of fixed-rate instruments and 53% of variable-rate borrowings (in 2012 the percentages were 37% of fixed-rate instruments and 63% of variable rate

borrowings). The fixed-rate debt instruments minimizes earnings volatility that would result from changes in

interest rates. The following table presents principal amounts and weighted average interest rates for our aggregate outstanding indebtedness at December 31, 2013.

The table below shows the fair value of our financial liabilities at December 31, 2013.

Indebtedness*	Amount Carrying value	Fair value	Interest rate		Maturity date
	(In millions)				
Fixed-rate indebtedness:					
Valhi loans from Snake River	$250.0	$250.0	9.4	%	2027
Tremont promissory note payable	19.1	19.1	3.0		2023
WCS financing capital lease	68.6	68.6	7.0		2035
WCS promissory note	2.4	2.4	6.0		2014
WCS promissory note	1.4	1.4	4.3		2014
Note payable to the City of Henderson	3.1	3.1	3.0		2020
Fixed-rate	344.6	344.6	8.5	%	
Variable-rate indebtedness:					
Kronos Contran note payable	$170.0	$170.0	7.4	%	2018
Valhi Contran credit facility	206.5	206.5	4.3		2015
Kronos North American credit facility	11.1	11.1	3.8		2017
BMI bank note payable	11.2	11.2	3.3		2025
Variable-rate	398.8	398.8	5.5	%	
Total	$743.4	$743.4	6.9	%	

*Excludes capital lease obligations.

Currency Exchange Rates. We are exposed to market risk arising from changes in currency exchange rates as a result of manufacturing and selling our products worldwide. Earnings are primarily affected by fluctuations in the value of the U.S. dollar relative to the euro, the Canadian dollar, the Norwegian krone and the United Kingdom pound sterling.

Certain of our sales generated by our non-U.S. operations are denominated in U.S. dollars. We periodically use currency forward contracts to manage a very nominal portion of currency exchange rate risk associated with trade receivables denominated in a currency other than the holder's functional currency or similar exchange rate risk associated with future sales. We have not entered into these contracts for trading or speculative purposes in the past, nor do we currently anticipate entering into such contracts for trading or speculative purposes in the future. See Note 18 to our Consolidated Financial Statements for a discussion of certain currency forward contracts to which we are a party at December 31, 2013.

See Notes 1 and 18 to our Consolidated Financial Statements for a discussion of the assumptions we used to estimate the fair value of the financial instruments to which we are a party at December 31, 2012 and 2013.

Raw Materials. Our Chemicals Segment generally enters into long-term supply agreements for certain critical raw materials, including TiO_2 feedstock. Many of these raw material contracts contain fixed quantities we are required to purchase or specify a range of quantities within which we are required to purchase. Raw material pricing under these agreements is generally negotiated quarterly or semi-annually depending on the suppliers.

Our Component Products Segment will occasionally enter into short-term commodity related raw material supply arrangements to mitigate the impact of future increases in raw material costs. We do not have long-term supply agreements for certain of our raw material requirements because either we believe the risk of unavailability of those raw materials is low and we believe the downside risk of price volatility to be too great or because long-term supply agreements for those materials are generally not available. We do not engage in commodity hedging programs.

Marketable Equity and Debt Security Prices. We are exposed to market risk due to changes in prices of the marketable securities we own. The fair value of such debt and equity securities (determined using Level 1, Level 2 and Level 3 inputs) at December 31, 2012 and 2013 was $257.7 million and $257.1 million, respectively. The potential change in the aggregate fair value of these investments, assuming a hypothetical 10% change in prices, would be approximately $25.8 million at December 31, 2012 and $25.7 million at December 31, 2013.

Other. We believe there may be a certain amount of incompleteness in the sensitivity analyses presented above. For example, the hypothetical effect of changes in interest rates discussed above ignores the potential effect on other variables that affect our results of operations and cash flows, such as demand for our products, sales volumes and selling prices and operating expenses. Contrary to the above assumptions, changes in interest rates rarely result in simultaneous comparable shifts along the yield curve. Also, our investment in The Amalgamated Sugar Company LLC represents a significant portion of our total portfolio of marketable securities. That investment serves as collateral for our loans from Snake River Sugar Company, and a decrease in the fair value of that investment would likely be mitigated by a decrease in the fair value of the related indebtedness. Accordingly, the amounts we present above are not necessarily an accurate reflection of the potential losses we would incur assuming the hypothetical changes in market prices were actually to occur.

The above discussion and estimated sensitivity analysis amounts include forward-looking statements of market risk which assume hypothetical changes in market prices. Actual future market conditions will likely differ materially from such assumptions. Accordingly, such forward-looking statements should not be considered to be projections by us of future events, gains or losses.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The information called for by this Item is contained in a separate section of this Annual Report. See “Index of Financial Statements” (page F-1).

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures—

We maintain a system of disclosure controls and procedures. The term “disclosure controls and procedures,” as defined by Exchange Act Rule 13a-15(e), means controls and other procedures that are designed to ensure that information required to be disclosed in the reports we file or submit to the SEC under the Securities Exchange Act of 1934, as amended (the “Act”), is recorded, processed, summarized and reported, within the time periods specified in the SEC’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information we are required to disclose in the reports we file or submit to the SEC under the Act is accumulated and communicated to our management, including our principal executive officer and our principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions to be made regarding required disclosure. Each of Steven L. Watson, our Chairman of the Board, President and Chief Executive Officer, and Bobby D. O’Brien, our Executive Vice President and Chief Financial Officer, have evaluated the design and effectiveness of our disclosure controls and procedures as of December 31, 2013. Based upon their evaluation, these executive officers have concluded that our disclosure controls and procedures were effective as of December 31,

2013.

Scope of Management Report on Internal Control Over Financial Reporting—

We also maintain internal control over financial reporting. The term “internal control over financial reporting,” as defined by Exchange Act Rule 13a-15(f), means a process designed by, or under the supervision of, our principal executive and principal financial officers, or persons performing similar functions, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of

financial reporting and the preparation of financial statements for external purposes in accordance with GAAP, and includes those policies and procedures that:

- pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of our assets,
- provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP, and that our receipts and expenditures are made only in accordance with authorizations of our management and directors, and
- provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our Consolidated Financial Statements.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to report on internal control over financial reporting in this Annual Report on Form 10-K for the year ended December 31, 2013. Under the rules of the SEC, our independent registered public accounting firm is also required to annually attest to our internal control over financial reporting.

As permitted by the SEC, our assessment of internal control over financial reporting at December 31, 2013 excludes (i) internal control over financial reporting of our equity method investees, (ii) internal control over the preparation of our financial statement schedules required by Article 12 of Regulation S-X and (iii) internal control over financial reporting as it relates to our newly-consolidated subsidiaries BMI and Landwell (as discussed in Note 3 to our Consolidated Financial Statements, which represent approximately 8% of our total assets at December 31, 2013). However, our assessment of internal control over financial reporting with respect to our equity method investees did include controls over the recording of amounts related to our investment that are recorded in our Consolidated Financial Statements, including controls over the selection of accounting methods for our investments, the recognition of equity method earnings and losses and the determination, valuation and recording of our investment account balances.

Changes in Internal Control Over Financial Reporting—

There has been no change to our internal control over financial reporting during the quarter ended December 31, 2013 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Management’s Report on Internal Control Over Financial Reporting—

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Our evaluation of the effectiveness of internal control over financial reporting is based upon the criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 1992 (commonly referred to as the “1992 COSO” framework). Based on our evaluation under that framework, we have concluded that our internal control over financial reporting was effective as of December 31, 2013.

PricewaterhouseCoopers LLP, the independent registered public accounting firm that has audited our consolidated financial statements included in this Annual Report, has audited the effectiveness of our internal control over financial reporting as of December 31, 2013, as stated in their report, which is included in this Annual Report on Form 10-K.

Certifications—

Our chief executive officer is required to annually file a certification with the New York Stock Exchange (“NYSE”), certifying our compliance with the corporate governance listing standards of the NYSE. During 2013, our chief executive officer filed such annual certification with the NYSE, indicating we were in compliance with such listing standards without qualification. Our chief executive officer and chief financial officer are also required to, among other things, quarterly file certifications with the SEC regarding the quality of our public disclosures, as required by Section 302 of the Sarbanes-Oxley Act of 2002. We have filed the certifications for the quarter ended December 31,

2013 as exhibits 31.1 and 31.2 to this Annual Report on Form 10-K.

ITEM 9B. OTHER INFORMATION

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated by reference to our 2014 definitive proxy statement we will file with the SEC pursuant to Regulation 14A within 120 days after the end of the fiscal year covered by this report (the "Valhi Proxy Statement").

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference to our 2014 proxy statement.

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

The information required by this Item is incorporated by reference to our 2014 proxy statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTORS INDEPENDENCE

The information required by this Item is incorporated by reference to our 2014 proxy statement. See also Note 16 to our Consolidated Financial Statements.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference to our 2014 proxy statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULE

(a) and (c) Financial Statements

The Registrant

Our Consolidated Financial Statements listed on the accompanying Index of Financial Statements and Schedule (see page F-1) are filed as part of this Annual Report.

50%-or-less owned persons

We are not required to provide any consolidated financial statements pursuant to Rule 3-09 of Regulation S-X.

(b) Exhibits

Included as exhibits are the items listed in the Exhibit Index. We have retained a signed original of any of these exhibits that contain signatures, and we will provide such exhibit to the Commission or its staff upon request. We will furnish a copy of any of the exhibits listed below upon request and payment of $4.00 per exhibit to cover our costs of furnishing the exhibits. Such requests should be directed to the attention of our Corporate Secretary at our corporate offices located at 5430 LBJ Freeway, Suite 1700, Dallas, Texas 75240. Pursuant to Item 601(b)(4)(iii) of Regulation S-K, we will furnish to the Commission upon request any instrument defining the rights of holders of long-term debt issues and other agreements related to indebtedness which do not exceed 10% of our consolidated total assets as of December 31, 2013.

Item No.	Exhibit Index
3.1+	Restated Certificate of Incorporation of Valhi, Inc.—incorporated by reference to Exhibit 3.1 to our Current Report on Form 8-K (File No. 1-5467) dated May 10, 2012 and filed on May 10, 2012.
3.2	Consent Agreement dated as of March 29, 2007 between Valhi, Inc. and Contran Corporation regarding the Amended and Restated Certificate of Designations, Rights and Preferences of 6% Series A Preferred Stock of Valhi, Inc.—incorporated by reference to Exhibit 10.2 to our Current Report on Form 8-K/A (File No. 1-5467) dated March 26, 2007 and filed by us on March 30, 2007.
3.3	By-Laws of Valhi, Inc. as amended—incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K (File No. 1-5467) dated November 6, 2007.
4.1	Satisfaction and Discharge of Indenture, Release, Assignment and Transfer, dated as of June 14, 2012, issued by The Bank of New York Mellon, formerly known as The Bank of New York, a New York banking corporation (incorporated by reference to Exhibit 10.4 to the Current Report on Form 8-K dated June 13, 2012 and filed by Kronos Worldwide, Inc. (Exchange Act No. 1-31763) on June 18, 2012).
10.1	Intercorporate Services Agreement between Valhi, Inc. and Contran Corporation effective as of January 1, 2004—incorporated by reference to Exhibit 10.1 to our Quarterly Report on Form 10-Q for the quarter ended March 31, 2004.
10.2	Intercorporate Services Agreement between Contran Corporation and NL Industries, Inc. effective as of January 1, 2004—incorporated by reference to Exhibit 10.1 to NL's Quarterly Report on Form 10-Q (File No. 1-640) for the quarter ended March 31, 2004.
10.3	Intercorporate Services Agreement between Contran Corporation and CompX International Inc. effective January 1, 2004—incorporated by reference to Exhibit 10.2 to CompX's Annual Report on Form 10-K (File No. 1-13905) for the year ended December 31, 2003.
10.4	Intercorporate Services Agreement between Contran Corporation and Kronos Worldwide, Inc. effective January 1, 2004—incorporated by reference to Exhibit No. 10.1 to Kronos' Quarterly Report on Form 10-Q (File No. 1-31763) for the quarter ended March 31, 2004.
10.5	Intercreditor Agreement dated as of June 18, 2012, by and between Wells Fargo Capital Finance and Wells Fargo Bank, National Association, and acknowledged by Kronos Worldwide, Inc., Kronos Louisiana, Inc. and Kronos (US), Inc. (incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K/A dated June 13, 2012 and filed by Kronos Worldwide, Inc. (Exchange Act No. 1-31763) on June 19, 2012).
10.6	Credit Agreement, dated June 13, 2012, by and among Kronos Worldwide, Inc. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K dated

June 13, 2012 and filed by Kronos Worldwide, Inc. (Exchange Act No. 1-31763) on June 18, 2012).

10.7 Guaranty and Security Agreement, dated June 13, 2012, among Kronos Worldwide, Inc., Kronos Louisiana, Inc., Kronos (US), Inc., Kronos International, Inc. and Wells Fargo Bank, National Association (incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K dated June 13, 2012 and filed by Kronos Worldwide, Inc. (Exchange Act No. 1-31763) on June 18, 2012).

10.7 Amended and Restated Tax Agreement between Valhi, Inc. and Contran Corporation—incorporated by reference to Exhibit 10.1 to the Annual Report on Form 10-K of Kronos Worldwide, Inc. (File No. 001-31763) for the year ended December 31, 2012.

10.9* Valhi, Inc. 2012 Director Stock Plan—incorporated by reference to Exhibit 4.5 of the Registration statement on Form S-8 of the Registrant (File No. 333-48391). Filed on May 31, 2012.

10.10* Kronos Worldwide, Inc. 2012 Director Stock Plan—incorporated by reference to Exhibit 4.4 of the Registration statement on Form S-8 of the Registrant (File No. 333-113425). Filed on May 31, 2012.

10.11* CompX International Inc. 2012 Director Stock Plan—incorporated by reference to Exhibit 4.4 of the Registration statement on Form S-8 of the Registrant (File No. 333-47539). Filed on May 31, 2012.

Item No.	Exhibit Index
10.12*	NL Industries, Inc. 2012 Director Stock Plan—incorporated by reference to Exhibit 4.4 of the Registrant's statement on Form S-8 (File No. 001-00640) Filed on May 31, 2012.
10.13	Agreement Regarding Shared Insurance dated as of October 30, 2003 by and between CompX International Inc., Contran Corporation, Keystone Consolidated Industries, Inc., Kronos Worldwide, Inc., NL Industries, Inc., Titanium Metals Corporation and Valhi, Inc.—incorporated by reference to Exhibit 10.32 to Kronos' Annual Report on Form 10-K (File No. 1-31763) for the year ended December 31, 2003.
10.14	Formation Agreement of The Amalgamated Sugar Company LLC dated January 3, 1997 (to be effective December 31, 1996) between Snake River Sugar Company and The Amalgamated Sugar Company—incorporated by reference to Exhibit 10.19 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1996.
10.15	Master Agreement Regarding Amendments to The Amalgamated Sugar Company Documents dated October 19, 2000—incorporated by reference to Exhibit 10.1 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.16	Prepayment and Termination Agreement dated October 14, 2005 among Valhi, Inc., Snake River Sugar Company and Wells Fargo Bank Northwest, N.A.—incorporated by reference to Exhibit No. 10.1 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.
10.17	Company Agreement of The Amalgamated Sugar Company LLC dated January 3, 1997 (to be effective December 31, 1996)—incorporated by reference to Exhibit 10.20 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1996.
10.18	First Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated May 14, 1997—incorporated by reference to Exhibit 10.1 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.
10.19	Second Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated November 30, 1998—incorporated by reference to Exhibit 10.24 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1998.
10.20	Third Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated October 19, 2000—incorporated by reference to Exhibit 10.2 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.21	Amended and Restated Company Agreement of The Amalgamated Sugar Company LLC dated October 14, 2005 among The Amalgamated Sugar Company LLC, Snake River Sugar Company and The

Amalgamated Collateral Trust—incorporated by reference to Exhibit No. 10.7 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.

10.22 Subordinated Promissory Note in the principal amount of $37.5 million between Valhi, Inc. and Snake River Sugar Company, and the related Pledge Agreement, both dated January 3, 1997— incorporated by reference to Exhibit 10.21 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1996.

10.23 Limited Recourse Promissory Note in the principal amount of $212.5 million between Valhi, Inc. and Snake River Sugar Company, and the related Limited Recourse Pledge Agreement, both dated January 3, 1997—incorporated by reference to Exhibit 10.22 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1996.

10.24 Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc., as amended and restated effective May 14, 1997—incorporated by reference to Exhibit 10.9 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.

10.25 Second Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc. dated November 30, 1998—incorporated by reference to Exhibit 10.28 to Valhi, Inc.'s Annual Report on Form 10-K (File No. 1-5467) for the year ended December 31, 1998.

Item No.	Exhibit Index
10.26	Third Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc. dated October 19, 2000—incorporated by reference to Exhibit 10.3 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.27	Fourth Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc. dated March 31, 2003—incorporated by reference to Exhibit No. 10.1 to Valhi, Inc.'s Quarterly Report on Form 10-Q (file No. 1-5467) for the quarter ended March 31, 2003.
10.28	Contingent Subordinate Pledge Agreement between Snake River Sugar Company and Valhi, Inc., as acknowledged by First Security Bank National Association as Collateral Agent, dated October 19, 2000—incorporated by reference to Exhibit 10.4 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.29	Contingent Subordinate Security Agreement between Snake River Sugar Company and Valhi, Inc., as acknowledged by First Security Bank National Association as Collateral Agent, dated October 19, 2000—incorporated by reference to Exhibit 10.5 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.30	Contingent Subordinate Collateral Agency and Paying Agency Agreement among Valhi, Inc., Snake River Sugar Company and First Security Bank National Association dated October 19, 2000— incorporated by reference to Exhibit 10.6 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.31	Deposit Trust Agreement related to the Amalgamated Collateral Trust among ASC Holdings, Inc. and Wilmington Trust Company dated May 14, 1997—incorporated by reference to Exhibit 10.2 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.
10.32	First Amendment to Deposit Trust Agreement dated October 14, 2005 among ASC Holdings, Inc. and Wilmington Trust Company—incorporated by reference to Exhibit No. 10.2 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.
10.33	Pledge Agreement between The Amalgamated Collateral Trust and Snake River Sugar Company dated May 14, 1997—incorporated by reference to Exhibit 10.3 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.
10.34	Second Pledge Amendment (SPT) dated October 14, 2005 among The Amalgamated Collateral Trust and Snake River Sugar Company—incorporated by reference to Exhibit No. 10.4 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.

10.35 Guarantee by The Amalgamated Collateral Trust in favor of Snake River Sugar Company dated May 14, 1997—incorporated by reference to Exhibit 10.4 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.

10.36 Second SPT Guaranty Amendment dated October 14, 2005 among The Amalgamated Collateral Trust and Snake River Sugar Company—incorporated by reference to Exhibit No. 10.5 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.

10.37 Voting Rights and Collateral Deposit Agreement among Snake River Sugar Company, Valhi, Inc., and First Security Bank, National Association dated May 14, 1997—incorporated by reference to Exhibit 10.8 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.

10.38 Subordination Agreement between Valhi, Inc. and Snake River Sugar Company dated May 14, 1997—incorporated by reference to Exhibit 10.10 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.

10.39 First Amendment to the Subordination Agreement between Valhi, Inc. and Snake River Sugar Company dated October 19, 2000—incorporated by reference to Exhibit 10.7 to Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.

Item No.	Exhibit Index
10.40	Form of Option Agreement among Snake River Sugar Company, Valhi, Inc. and the holders of Snake River Sugar Company's 10.9% Senior Notes Due 2009 dated May 14, 1997—incorporated by reference to Exhibit 10.11 to the Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended June 30, 1997.
10.41	Option Agreement dated October 14, 2005 among Valhi, Inc., Snake River Sugar Company, Northwest Farm Credit Services, FLCA and U.S. Bank National Association—incorporated by reference to Exhibit No. 10.6 to Valhi, Inc.'s Amendment No. 1 to its Current Report on Form 8-K (File No. 1-5467) dated October 18, 2005.
10.42	First Amendment to Option Agreements among Snake River Sugar Company, Valhi Inc., and the holders of Snake River's 10.9% Senior Notes Due 2009 dated October 19, 2000—incorporated by reference to Exhibit 10.8 to the Valhi, Inc.'s Quarterly Report on Form 10-Q (File No. 1-5467) for the quarter ended September 30, 2000.
10.43	Formation Agreement dated as of October 18, 1993 among Tioxide Americas Inc., Kronos Louisiana, Inc. and Louisiana Pigment Company, L.P.—incorporated by reference to Exhibit 10.2 of NL's Quarterly Report on Form 10-Q (File No. 1-640) for the quarter ended September 30, 1993.
10.44	Joint Venture Agreement dated as of October 18, 1993 between Tioxide Americas Inc. and Kronos Louisiana, Inc.—incorporated by reference to Exhibit 10.3 of NL's Quarterly Report on Form 10-Q (File No. 1-640) for the quarter ended September 30, 1993.
10.45	Kronos Offtake Agreement dated as of October 18, 1993 by and between Kronos Louisiana, Inc. and Louisiana Pigment Company, L.P.—incorporated by reference to Exhibit 10.4 of NL's Quarterly Report on Form 10-Q (File No. 1-640) for the quarter ended September 30, 1993.
10.46	Amendment No. 1 to Kronos Offtake Agreement dated as of December 20, 1995 between Kronos Louisiana, Inc. and Louisiana Pigment Company, L.P.—incorporated by reference to Exhibit 10.22 of NL's Annual Report on Form 10-K (File No. 1-640) for the year ended December 31 1995.
10.47	Allocation Agreement dated as of October 18, 1993 between Tioxide Americas Inc., ICI American Holdings, Inc., Kronos Worldwide, Inc. (f/k/a Kronos, Inc.) and Kronos Louisiana, Inc.—incorporated by reference to Exhibit 10.10 to NL's Quarterly Report on Form 10-Q (File No. 1-640) for the quarter ended September 30, 1993.
10.48	Lease Contract dated June 21, 1952, between Farbenfabrieken Bayer Aktiengesellschaft and Titangesellschaft mit beschrankter Haftung (German language version and English translation thereof)—incorporated by reference to Exhibit 10.14 of NL's Annual Report on Form 10-K (File No. 1-640) for the year ended December 31, 1985.

10.49 Administrative Settlement for Interim Remedial Measures, Site Investigation and Feasibility Study dated July 7, 2000 between the Arkansas Department of Environmental Quality, Halliburton Energy Services, Inc., M I, LLC and TRE Management Company—incorporated by reference to Exhibit 10.1 to Tremont Corporation's Quarterly Report on Form 10-Q (File No. 1-10126) for the quarter ended June 30, 2002.

10.50 Restated and Amended Agreement by and between Richards Bay Titanium (Proprietary) Limited (acting through its sales agent Rio Tinto Iron & Titanium Limited) and Kronos (US), Inc effective January 1, 2012 – incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of Kronos Worldwide, Inc. (File No. 001-31763) for the quarter ended March 31, 2013.

10.51 Credit Agreement, dated February 18, 2014, by and among Kronos Worldwide, Inc. and Deutsche Bank AG New York Branch - incorporated by reference to Exhibit 10.1 of the Current Report on Form 8-K and filed by Kronos Worldwide, Inc. (File No. 001-31763) dated February 18, 2014 and filed by the registrant on February 18, 2014.

10.52 Guaranty and Security Agreement, dated February 18, 2014, among Kronos Worldwide, Inc., Kronos Louisiana, Inc., Kronos (US), Inc., Kronos International, Inc. and Deutsche Bank AG New York Branch - incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K (File No. 001-31763) dated February 18, 2014 and filed by and filed by Kronos Worldwide, Inc. on February 18, 2014.

Item No.	Exhibit Index
10.53	Intercreditor Agreement dated as of February 18, 2014, by and between Wells Fargo Capital Finance and Deutsche Bank AG New York Branch, and acknowledged by Kronos Worldwide, Inc., Kronos Louisiana, Inc. and Kronos (US), Inc. - incorporated by reference to Exhibit 10.3 to the Current Report on Form 8-K (File No. 001-31763) dated February 18, 2014 and filed by and filed by Kronos Worldwide, Inc. on February 18, 2014.
21.1**	Subsidiaries of Valhi, Inc.
23.1**	Consent of PricewaterhouseCoopers LLP with respect to Valhi's Consolidated Financial Statements
31.1**	Certification
31.2**	Certification
32.1**	Certification
101.INS **	XBRL Instance Document
101.SCH **	XBRL Taxonomy Extension Schema
101.CAL **	XBRL Taxonomy Extension Calculation Linkbase
101.DEF **	XBRL Taxonomy Extension Definition Linkbase
101.LAB **	XBRL Taxonomy Extension Label Linkbase
101.PRE **	XBRL Taxonomy Extension Presentation Linkbase

* Management contract, compensatory plan or agreement.
** Filed herewith.
+ Exhibit 3.1 is restated for the purposes of the disclosure requirements of Item 601 of Regulation S-K promulgated by the U.S. Securities and Exchange Commission and does not represent a restated certificate of incorporation that has been filed with the Delaware Secretary of State.

Annual Report on Form 10-K

Items 8, 15(a) and 15(c)

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We have omitted all financial statement schedules because they are not applicable or the required amounts are either not material or are presented in the Notes to the Consolidated Financial Statements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of Valhi, Inc.:

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, of comprehensive income (loss), of stockholders' equity and of cash flows present fairly, in all material respects, the financial position of Valhi, Inc. and its subsidiaries at December 31, 2012 and 2013 and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2013 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control Over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company's internal control over financial reporting based on our audits (which were integrated audits in 2012 and 2013). We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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

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

As described in the Scope of Management's Report on Internal Controls Over Financial Reporting under Item 9A, management has excluded Basic Management, Inc. ("BMI") and The Landwell Company, L.P. ("Landwell") from its assessment of internal control over financial reporting as of December 31, 2013 because controlling interests in these entities were acquired in a purchase business combination during 2013. We have also excluded BMI and Landwell from our audit of internal control over financial reporting. BMI and Landwelll are majority owned subsidiaries whose

total assets represent approximately 8% of the related consolidated balance sheet amount as of December 31, 2013.

March 17, 2014

/s/ PricewaterhouseCoopers LLP

Dallas, Texas

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In millions)

	December 31,	
	2012	2013
ASSETS		
Current assets:		
Cash and cash equivalents	$366.9	$142.8
Restricted cash equivalents	8.1	10.4
Marketable securities	.9	3.8
Accounts and other receivables, net	283.9	273.4
Refundable income taxes	18.3	15.2
Receivable from affiliates	.3	14.7
Land held for development	—	14.3
Inventories, net	650.3	430.6
Other current assets	25.1	20.8
Deferred income taxes	9.6	23.0
Total current assets	1,363.4	949.0
Other assets:		
Marketable securities	256.8	253.3
Investment in affiliates	126.1	102.3
Goodwill	379.7	379.7
Deferred income taxes	120.3	149.2
Pension asset	5.1	.6
Other assets	156.0	336.7
Total other assets	1,044.0	1,221.8
Property and equipment:		
Land	48.3	51.5
Buildings	280.5	285.1
Equipment	1,127.7	1,194.8
Treatment, storage and disposal facility	158.7	158.9
Mining properties	72.3	66.5
Construction in progress	40.7	54.2
	1,728.2	1,811.0
Less accumulated depreciation	965.1	1,014.6
Net property and equipment	763.1	796.4
Total assets	$3,170.5	$2,967.2

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In millions, except share data)

	December 31,	
	2012	2013
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current maturities of long-term debt	$29.6	$10.7
Accounts payable	169.6	133.2
Accrued liabilities	112.2	188.2
Payable to affiliates	52.8	51.5
Income taxes	23.1	8.9
Deferred income taxes	11.2	2.2
Total current liabilities	398.5	394.7
Noncurrent liabilities:		
Long-term debt	880.5	741.8
Deferred income taxes	454.8	431.1
Accrued pension costs	202.9	169.3
Accrued environmental remediation and related costs	42.6	113.6
Accrued postretirement benefits costs	21.2	13.7
Other liabilities	78.3	110.2
Total noncurrent liabilities	1,680.3	1,579.7
Equity:		
Valhi stockholders' equity:		
Preferred stock, $.01 par value; 5,000 shares authorized; 5,000 shares issued	667.3	667.3
Common stock, $.01 par value; 500.0 million shares authorized; 355.2 million shares issued	3.6	3.6
Additional paid-in capital	78.9	27.6
Retained earnings (deficit)	75.4	(39.6)
Accumulated other comprehensive loss	(42.0)	(8.0)
Treasury stock, at cost—13.2 million shares	(49.6)	(49.6)
Total Valhi stockholders' equity	733.6	601.3
Noncontrolling interest in subsidiaries	358.1	391.5
Total equity	1,091.7	992.8
Total liabilities and equity	$3,170.5	$2,967.2

Commitments and contingencies (Notes 9, 12, 16 and 17)

See accompanying Notes to Consolidated Financial Statements.

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VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except per share data)

	Years ended December 31,		
	2011	2012	2013
Revenues and other income:			
Net sales	$2,025.1	$2,087.3	$1,863.6
Other income, net	49.0	70.6	88.0
Total revenues and other income	2,074.1	2,157.9	1,951.6
Costs and expenses:			
Cost of sales	1,278.4	1,512.1	1,729.4
Selling, general and administrative	268.9	273.3	375.1
Loss on prepayment of debt, net	3.1	7.2	8.9
Goodwill impairment	—	6.4	—
Assets held for sale write-down	1.1	1.2	—
Interest	61.8	56.3	56.1
Total costs and expenses	1,613.3	1,856.5	2,169.5
Income (loss) from continuing operations before income taxes	460.8	301.4	(217.9)
Income tax expense (benefit)	169.9	104.8	(91.0)
Income (loss) from continuing operations	290.9	196.6	(126.9)
Income from discontinued operations, net of tax	4.1	25.5	—
Net income (loss)	295.0	222.1	(126.9)
Noncontrolling interest in net income (loss) of subsidiaries	77.5	62.3	(28.9)
Net income (loss) attributable to Valhi stockholders	$217.5	$159.8	$(98.0)

See accompanying Notes to Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS (CONTINUED)

(In millions, except per share data)

	Years ended December 31,		
	2011	2012	2013
Amounts attributable to Valhi stockholders:			
Income (loss) from continuing operations	$214.5	$141.4	$(98.0)
Income from discontinued operations	3.0	18.4	—
Net income (loss) attributable to Valhi stockholders	$217.5	$159.8	$(98.0)
Basic and diluted net income (loss) per share:			
Income (loss) from continuing operations	$.63	$.41	$(.29)
Income (loss) from discontinued operations	.01	.06	—
Net income (loss) per share	$.64	$.47	$(.29)
Cash dividends per share	$.158	$.192	$.20
Basic and diluted weighted average shares outstanding	342.1	342.0	342.0

See accompanying Notes to Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In millions)

	Years ended December 31,		
	2011	2012	2013
Net income (loss)	$295.0	$222.1	$(126.9)
Other comprehensive income (loss), net of tax:			
Currency translation	(28.2)	19.6	7.5
Marketable securities	12.9	(20.8)	10.3
Defined benefit pension plans	(16.1)	(37.5)	32.1
Other postretirement benefit plans	(2.2)	(1.5)	3.2
Total other comprehensive income (loss), net	(33.6)	(40.2)	53.1
Comprehensive income (loss)	261.4	181.9	(73.8)
Comprehensive income (loss) attributable to noncontrolling interest	88.4	40.8	(9.8)
Comprehensive income (loss) attributable to Valhi stockholders	$173.0	$141.1	$(64.0)

See accompanying Notes to Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF EQUITY

Years ended December 31, 2011, 2012 and 2013

(In millions)

	Valhi Stockholders' Equity							
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings (deficit)	Accumulated other comprehensive income (loss)	Treasury stock	Non-controlling interest	Total equity
Balance at December 31, 2010	$667.3	$ 3.6	$ 73.8	$(183.2)	$ 21.2	$(40.9)	$ 276.4	$818.2
Net income	—	—	—	217.5	—	—	77.5	295.0
Cash dividends	—	—	—	(53.7)	—	—	(29.3)	(83.0)
Other comprehensive income (loss), net	—	—	—	—	(44.5)	—	10.9	(33.6)
Treasury stock acquired	—	—	—	—	—	(8.7)	—	(8.7)
Equity transactions with noncontrolling interest, net	—	—	.4	—	—	—	.3	.7
Other	—	—	4.4	—	—	—	—	4.4
Balance at December 31, 2011	667.3	3.6	78.6	(19.4)	(23.3)	(49.6)	335.8	993.0
Net income	—	—	—	159.8	—	—	62.3	222.1
Cash dividends	—	—	—	(65.0)	—	—	(18.6)	(83.6)
Other comprehensive loss, net	—	—	—	—	(18.7)	—	(21.5)	(40.2)
Equity transactions with noncontrolling interest, net	—	—	.2	—	—	—	.1	.3
Other	—	—	.1	—	—	—	—	.1
Balance at December 31, 2012	667.3	3.6	78.9	75.4	(42.0)	(49.6)	358.1	1,091.7
Net loss	—	—	—	(98.0)	—	—	(28.9)	(126.9)
Cash dividends	—	—	(50.9)	(17.0)	—	—	(18.2)	(86.1)
Other comprehensive income, net	—	—	—	—	34.0	—	19.1	53.1
Noncontrolling interest of businesses acquired	—	—	—	—	—	—	61.5	61.5
Equity transactions with noncontrolling interest, net	—	—	(.4)	—	—	—	(.1)	(.5)
Balance at December 31, 2013	$667.3	$ 3.6	$ 27.6	$(39.6)	$ (8.0)	$(49.6)	$ 391.5	$992.8

See accompanying Notes to Consolidated Financial Statements.

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VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

(In millions)

	Years ended December 31,		
	2011	2012	2013
Cash flows from operating activities:			
Net income (loss)	$295.0	$222.1	$(126.9)
Depreciation and amortization	63.8	69.4	74.5
Net (gain) loss from:			
Bargain purchase and remeasurement of existing investment in acquiree	—	—	(54.6)
Litigation settlement	—	(14.7)	—
Sale of discontinued operations	—	(23.7)	—
Securities transactions, net	.6	(21.8)	(.2)
Disposal of property and equipment, net	.9	(1.5)	.5
Loss on prepayment of debt, net	3.1	7.2	8.9
Call premium paid	(2.5)	(6.2)	—
Assets held for sale write-down	1.1	1.2	—
Goodwill impairment	—	6.4	—
Noncash interest expense	5.5	2.6	1.5
Benefit plan expense greater (less) than cash funding requirements:			
Defined benefit pension expense	.4	(3.3)	8.9
Other postretirement benefit expense	(1.8)	(1.4)	(1.9)
Deferred income taxes	95.3	51.5	(114.8)
Equity in joint venture earnings	.5	.2	(.5)
Net distributions from (contributions to) TiO_2 manufacturing joint venture, net	3.8	(20.7)	10.9
Other, net	1.3	(3.1)	6.5
Change in assets and liabilities:			
Accounts and other receivables, net	(47.9)	(6.7)	22.9
Inventories, net	(184.3)	(184.6)	220.0
Accounts payable and accrued liabilities	96.1	(44.2)	73.4
Income taxes	19.8	(20.0)	(9.6)
Accounts with affiliates	(36.6)	65.4	(18.7)
Other noncurrent assets	(3.3)	(11.7)	(2.1)
Other noncurrent liabilities	(13.2)	11.8	.2
Other, net	(5.2)	(2.3)	18.2
Net cash provided by operating activities	292.4	71.9	117.1

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(In millions)

	Years ended December 31,		
	2011	2012	2013
Cash flows from investing activities:			
Capital expenditures	$(146.2)	$(98.8)	$(74.6)
Capitalized permit costs	(8.9)	(4.1)	(1.5)
Acquisition of a businesses	(4.8)	—	(5.3)
Cash of discontinued operations	—	(5.4)	—
Cash of businesses acquired	—	—	27.4
Purchases of:			
Mutual funds	(272.8)	—	—
Titanium Metals Corporation (“TIMET”) common stock	(30.4)	—	—
Other marketable securities	(6.9)	(11.7)	(7.9)
Proceeds from:			
Disposal of TIMET common stock	—	107.6	—
Disposal of mutual funds	251.0	21.1	—
Disposal of other marketable securities	5.0	12.4	11.1
Sale of business	.3	58.0	—
Real estate-related litigation settlement	—	15.6	—
Collection of real-estate related note receivable	15.0	—	3.0
Disposal of assets held for sale	—	3.6	1.6
Loan to affiliate:			
Loan	(11.2)	(52.8)	—
Collection	—	64.0	—
Change in restricted cash equivalents, net	(3.0)	(15.7)	(9.9)
Other, net	(8.0)	7.1	(.1)
Net cash provided by (used in) investing activities	(220.9)	100.9	(56.2)
Cash flows from financing activities:			
Indebtedness:			
Borrowings	121.3	732.8	493.8
Principal payments	(328.8)	(546.0)	(693.3)
Deferred financing costs paid	(.1)	(7.2)	—
Valhi cash dividends paid	(53.7)	(65.0)	(67.9)
Distributions to noncontrolling interest in subsidiaries	(29.3)	(18.6)	(18.2)
Purchase of Kronos common stock	—	—	(.7)
Treasury stock acquired	(9.5)	—	—
Issuance of Valhi common stock and other, net	.3	—	.1
Net cash provided by (used in) financing activities	(299.8)	96.0	(286.2)
Net increase (decrease)	$(228.3)	$268.8	$(225.3)

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VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)

(In millions)

	Years ended December 31,		
	2011	2012	2013
Cash and cash equivalents—net change from:			
Operating, investing and financing activities	$(228.3)	$268.8	$(225.3)
Effect of exchange rates on cash	(.4)	1.7	1.2
Net change for the year	(228.7)	270.5	(224.1)
Balance at beginning of year	325.1	96.4	366.9
Balance at end of year	$96.4	$366.9	$142.8
Supplemental disclosures:			
Cash paid for:			
Interest, net of amounts capitalized (including call premium paid)	$67.0	$65.5	$55.0
Income taxes, net	73.8	71.0	15.6
Noncash investing activities:			
Accruals for capital expenditures	23.5	16.1	4.6
Noncash financing activities:			
Amounts issued in connection with business combination:			
Promissory note	—	—	19.1
Deferred payment obligation	—	—	8.2
Accrued construction retainage payable converted to note payable	—	—	2.8

See accompanying Notes to Consolidated Financial Statements.

VALHI, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

December 31, 2013

Note 1—Summary of significant accounting policies:

Nature of our business. Valhi, Inc. (NYSE: VHI) is primarily a holding company. We operate through our wholly-owned and majority-owned subsidiaries, including NL Industries, Inc., Kronos Worldwide, Inc., CompX International Inc., Tremont LLC and Waste Control Specialists LLC ("WCS"). Kronos (NYSE: KRO), NL (NYSE: NL), and CompX (NYSE MKT: CIX) each file periodic reports with the Securities and Exchange Commission ("SEC").

Organization. We are majority owned by Contran Corporation and one of its subsidiaries, which own approximately 94% of our outstanding common stock at December 31, 2013. Substantially all of Contran's outstanding voting stock is held by family trusts established for the benefit of Lisa K. Simmons and Serena Simmons Connelly, daughters of Harold C. Simmons, and their children (for which Ms. Lisa Simmons and Ms. Connelly are co-trustees) or is held directly by Ms. Lisa Simmons and Ms. Connelly or persons or entities related to them, including their step-mother Annette C. Simmons, the widow of Mr. Simmons. Prior to his death in December 2013, Mr. Simmons served as sole trustee of the family trusts. Under a voting agreement entered into in February 2014 by all of the voting stockholders of Contran, the size of the board of directors of Contran was fixed at five members, each of Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons have the right to designate one of the five members of the Contran board and the other two members of the Contran board must consist of members of Contran management. Ms. Lisa Simmons, Ms. Connelly, and Ms. Annette Simmons each serve as members of the Contran board. The voting agreement expires in February 2017 (unless Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons otherwise mutually agree), and the ability of Ms. Lisa Simmons, Ms. Connelly, and Ms. Annette Simmons to each designate one member of the Contran board is dependent upon each of their continued beneficial ownership of at least 5% of the combined voting stock of Contran. Consequently, Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons may be deemed to control Contran and us.

Unless otherwise indicated, references in this report to "we," "us" or "our" refer to Valhi, Inc and its subsidiaries, taken as a whole.

Management's estimates. The preparation of our Consolidated Financial Statements in conformity with accounting principles generally accepted in the United States of America ("GAAP"), requires us to make estimates and assumptions that affect the reported amounts of our assets and liabilities and disclosures of contingent assets and liabilities at each balance sheet date and the reported amounts of our revenues and expenses during each reporting period. Actual results may differ significantly from previously-estimated amounts under different assumptions or conditions.

Principles of consolidation. Our consolidated financial statements include the financial position, results of operations and cash flows of Valhi and our majority-owned and wholly-owned subsidiaries. We eliminate all material intercompany accounts and balances. Changes in ownership are accounted for as equity transactions with no gain or loss recognized on the transaction unless there is a change in control. See Note 3.

Foreign currency translation. The financial statements of our foreign subsidiaries are translated to U.S. dollars. The functional currency of our foreign subsidiaries is generally the local currency of the country. Accordingly, we translate the assets and liabilities at year-end rates of exchange, while we translate their revenues and expenses at average

exchange rates prevailing during the year. We accumulate the resulting translation adjustments in stockholders' equity as part of accumulated other comprehensive income (loss), net of related deferred income taxes and noncontrolling interest. We recognize currency transaction gains and losses in income.

Derivatives and hedging activities. We recognize derivatives as either an asset or liability measured at fair value in accordance with Accounting Standards Codification ("ASC") Topic 815, Derivatives and Hedging. We recognize the effect of changes in the fair value of derivatives either in net income or other comprehensive income (loss), depending on the intended use of the derivative. See Note 18.

Cash and cash equivalents. We classify bank time deposits and government and commercial notes and bills with original maturities of three months or less as cash equivalents.

Restricted cash, cash equivalents and marketable debt securities. We classify cash, cash equivalents and marketable debt securities that have been segregated or are otherwise limited in use as restricted. To the extent the restricted amount relates to a recognized liability, we classify the restricted amount as current or noncurrent according to the corresponding liability. To the extent the restricted amount does not relate to a recognized liability, we classify restricted cash as a current asset and we classify the restricted debt security as either a current or noncurrent asset depending upon the maturity date of the security.

Marketable securities and securities transactions. We carry marketable debt and equity securities at fair value. ASC Topic 820, Fair Value Measurements and Disclosures, establishes a consistent framework for measuring fair value and (with certain exceptions) this framework is generally applied to all financial statements items required to be measured at fair value. The standard requires fair value measurements to be classified and disclosed in one of the following three categories:

- Level 1—Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities;
- Level 2—Quoted prices in markets that are not active, or inputs which are observable, either directly or indirectly, for substantially the full term of the assets or liability; and
- Level 3—Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable.

We recognize unrealized and realized gains and losses on trading securities in income. We accumulate unrealized gains and losses on available-for-sale securities as part of accumulated other comprehensive income (loss), net of related deferred income taxes and noncontrolling interest. Realized gains and losses are based on specific identification of the securities sold. See Notes 4, 11 and 19.

Accounts receivable. We provide an allowance for doubtful accounts for known and estimated potential losses arising from our sales to customers based on a periodic review of these accounts.

Inventories and cost of sales. We state inventories at the lower of cost or market, net of allowance for obsolete and slow-moving inventories. We generally base inventory costs for all inventory categories on average cost that approximates the first-in, first-out method. Inventories include the costs for raw materials, the cost to manufacture the raw materials into finished goods and overhead. Depending on the inventory's stage of completion, our manufacturing costs can include the costs of packing and finishing, utilities, maintenance, depreciation, shipping and handling, and salaries and benefits associated with our manufacturing process. We allocate fixed manufacturing overhead based on normal production capacity. Unallocated overhead costs resulting from periods with abnormally low production levels are charged to expense as incurred. As inventory is sold to third parties, we recognize the cost of sales in the same period the sale occurs. We periodically review our inventory for estimated obsolescence or instances when inventory is no longer marketable for its intended use, and we record any write-down equal to the difference between the cost of inventory and its estimated net realizable value based on assumptions about alternative uses, market conditions and other factors.

Land held for development. Land held for development relates to Basic Management, Inc. ("BMI") and The Landwell Company L.P. ("Landwell"), for which we acquired a controlling interest in December 2013, see Note 3. The primary asset of Landwell is certain real property in Henderson, Nevada some of which we are developing for residential lots in a master planned community. Land held for development was recorded at the estimated acquisition date fair value based on a value per developable acre at the time of purchase. Development costs, including infrastructure improvements, real estate taxes, capitalized interest and other costs, some of which may be allocated, are capitalized

during the period incurred. We allocate costs to each parcel sold on a pro-rata basis associated with the relevant development activity. As land parcels are sold, costs of land sales, including land and development costs, are allocated based on specific identification, relative sales value, square footage or a combination of these methods. All sales and marketing activities and general overhead are charged to selling, general and administrative expense as incurred.

Investment in affiliates and joint ventures. We account for investments in more than 20%-owned but less than majority-owned companies by the equity method. See Note 7. We allocate any differences between the cost of each investment and our pro-rata share of the entity's separately-reported net assets among the assets and liabilities of the entity based upon estimated relative fair values. We amortize these differences, which were not material at December 31, 2013, to income as the entities depreciate, amortize or dispose of the related net assets.

Goodwill and other intangible assets; amortization expense. Goodwill represents the excess of cost over fair value of individual net assets acquired in business combinations. Goodwill is not subject to periodic amortization. We amortize other intangible assets by the straight-line method over their estimated lives and state them net of accumulated amortization. We evaluate goodwill for impairment, annually, or when circumstances indicate the carrying value may not be recoverable. We evaluate other intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. See Note 8.

Capitalized operating permits. Our Waste Management Segment capitalizes direct costs related to the acquisition or renewal of operating permits and amortize such costs by the straight-line method over the term of the applicable permit. Our net capitalized operating permit costs include (i) costs to renew certain permits for which the renewal application is pending with the applicable regulatory agency and (ii) costs to apply for certain new permits which have not yet been issued by the applicable regulatory authority. We currently expect renewal of the permits for which application is still pending will occur in the ordinary course of business, and we are amortizing costs related to such renewals from the date the prior permit expired. All operating permits are generally subject to renewal at the option of the issuing governmental agency. See Note 7.

Property and equipment; depreciation expense. We state property and equipment at acquisition cost, including capitalized interest on borrowings during the actual construction period of major capital projects. In 2011, 2012 and 2013 we capitalized $3.3 million, $1.7 million and $1.6 million, respectively, of interest costs. We compute depreciation of property and equipment for financial reporting purposes (including mining equipment) principally by the straight-line method over the estimated useful lives of the assets as follows:

Asset	Useful lives
Buildings and improvements	10 to 40 years
Machinery and equipment	3 to 20 years
Mine development costs	Units-of-production
Landfill disposal costs	Units-of-consumption

We expense expenditures for maintenance, repairs and minor renewals as incurred that do not improve or extend the life of the assets, including planned major maintenance.

We have a governmental concession with an unlimited term to operate our ilmenite mines in Norway. Mining properties consist of buildings and equipment used in our Norwegian ilmenite mining operations. While we own the land and ilmenite reserves associated with the mining operations, such land and reserves were acquired for nominal value and we have no material asset recognized for the land and reserves related to our mining operations.

We operate waste disposal facilities. We capitalize preparation costs for landfill disposal cells, including costs relating to excavation and grading and the design and construction of liner and leachate collection system. We recognize closure and post closure costs as part of the carrying value disposal facilities.

We perform impairment tests when events or changes in circumstances indicate the carrying value may not be recoverable. We consider all relevant factors. We perform the impairment test by comparing the estimated future undiscounted cash flows (exclusive of interest expense) associated with the asset to the asset's net carrying value to determine if a write-down to fair value is required.

Closure and post closure costs. The closure and post closure obligations related to our Waste Management Segment's waste disposal sites are covered by the scope of ASC Topic 410, Asset Retirement and Environmental Obligations. We recognize the fair value of a liability for an asset retirement obligation in accordance with ASC Topic 410 in the period in which the liability is incurred, with an offsetting increase in the carrying amount of the related long-lived asset. Over time, we accrete the liability to its future value, and we depreciate the capitalized cost over the useful life of the related asset. The accretion and depreciation expenses are

reported as a component of cost of sales in the accompanying statement of operations. We account for future revisions in the estimated fair value of the asset retirement obligation due to changes in the amount and/or timing of the expected future cash flows to settle the retirement obligation, prospectively as an adjustment to the previously-recognized asset retirement cost. Upon settlement of the liability, we will either settle the obligation for its recorded amount or incur a gain or loss upon settlement. See Note 10.

Long-term debt. We state long-term debt net of any unamortized original issue premium or discount. We classify amortization of deferred financing costs and any premium or discount associated with the issuance of indebtedness as interest expense, and compute amortization by either the interest method or the straight-line method over the term of the applicable issue.

Employee benefit plans. Accounting and funding policies for our retirement plans are described in Note 11.

Income taxes. We and our qualifying subsidiaries are members of Contran's consolidated U.S federal income tax group (the "Contran Tax Group"). We and certain of our qualifying subsidiaries also file consolidated income tax returns with Contran in various U.S. state jurisdictions. As a member of the Contran Tax Group, we are jointly and severally liable for the federal income tax liability of Contran and the other companies included in the Contran Tax Group for all periods in which we are included in the Contran Tax Group. See Note 17. As a member of the Contran Tax Group, we are a party to a tax sharing agreement which provides that we compute our tax provision for U.S. income taxes on a separate-company basis using the tax elections made by Contran. Pursuant to the tax sharing agreement, we make payments to or receive payments from Contran in amounts we would have paid to or received from the U.S. Internal Revenue Service or the applicable state tax authority had we not been a member of the Contran Tax Group. Generally, subsidiaries make payments to or receive payments from us in the amounts they would have paid to or received from the Internal Revenue Service or the applicable state tax authority had they not been members of the Contran Tax Group. We made net cash payments for income taxes to Contran of $10.3 million in 2011, $6.0 million in 2012 and $6.5 million in 2013.

We recognize deferred income tax assets and liabilities for the expected future tax consequences of temporary differences between amounts recorded in our Consolidated Financial Statements and the tax basis of our assets and liabilities, including investments in our subsidiaries and affiliates who are not members of the Contran Tax Group and undistributed earnings of foreign subsidiaries which are not deemed to be permanently reinvested. In addition, we recognize deferred income taxes with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock because the exemption under GAAP to avoid recognition of such deferred income taxes is not available to us. The earnings of our foreign subsidiaries subject to permanent reinvestment plans aggregated $.9 billion at December 31, 2013 (at December 31, 2012 the amount was $1.0 billion). It is not practical for us to determine the amount of the unrecognized deferred income tax liability related to these earnings due to the complexities associated with the U.S. taxation on earnings of foreign subsidiaries repatriated to the U.S. We periodically evaluate our deferred tax assets in the various taxing jurisdictions in which we operate and adjust any related valuation allowance based on the estimate of the amount of such deferred tax assets we believe does not meet the more-likely-than-not recognition criteria.

We record a reserve for uncertain tax positions where we believe it is more-likely-than-not our position will not prevail with the applicable tax authorities. The amount of the benefit associated with our uncertain tax positions that we recognize is limited to the largest amount for which we believe the likelihood of realization is greater than 50%. We accrue penalties and interest on the difference between tax positions taken on our tax returns and the amount of benefit recognized for financial reporting purposes. We classify our reserves for uncertain tax positions in a separate current or noncurrent liability, depending on the nature of the tax position. See Note 12.

Environmental remediation and related costs. We record liabilities related to environmental remediation and related costs when estimated future expenditures are probable and reasonably estimable. We adjust these accruals as further information becomes available to us or as circumstances change. We generally do not discount estimated future expenditures to its present value due to the uncertainty of the timing of the ultimate payout. We recognize any recoveries of remediation costs from other parties when we deem their receipt to be probable. We expense any environmental remediation related legal costs as incurred. At December 31, 2012 and 2013, we had not recognized any receivables for recoveries. See Note 17.

Net sales. We record sales when products are shipped and title and other risks and rewards of ownership have passed to the customer, or when we perform services. We include amounts charged to customers for shipping and handling costs in net sales. We state sales net of price, early payment and distributor discounts and volume rebates. We report taxes assessed by a governmental authority such as sales, use, value added, excise taxes and fees from the State of Texas and Andrews County, Texas on a net basis (i.e., we do not recognize these taxes in either our revenues or in our costs and expenses).

Selling, general and administrative expenses; shipping and handling costs; advertising costs; research and development costs. Selling, general and administrative expenses include costs related to marketing, sales, distribution, shipping and handling, research and development, legal, environmental remediation and administrative functions such as accounting, treasury and finance, and includes costs for salaries and benefits not associated with our manufacturing process, travel and entertainment, promotional materials and professional fees. Shipping and handling costs of our Chemicals Segment were approximately $93 million in 2011, $89 million in 2012 and $93 million in 2013. Shipping and handling costs of our Component Products and Waste Management Segments are not material. We expense advertising and research, development and sales technical support costs as incurred. Advertising costs attributable to continuing operations were approximately $2 million in 2011, $1 million in 2012 and $2 million in 2013. Research, development and certain sales technical support costs attributable to continuing operations were approximately $20 million in 2011, $19 million in 2012 and $18 million in 2013.

Note 2—Business and geographic segments:

Business segment	Entity	% controlled at December 31, 2013
Chemicals	Kronos	80%
Component products	CompX	87%
Waste management	WCS	100%

Our control of Kronos includes 50% we hold directly and 30% held directly by NL. We own 83% of NL. Our control of CompX is through NL. See Note 3.

We are organized based upon our operating subsidiaries. Our operating segments are defined as components of our consolidated operations about which separate financial information is available that is regularly evaluated by our chief operating decision maker in determining how to allocate resources and in assessing performance. Each operating segment is separately managed, and each operating segment represents a strategic business unit offering different products.

We have the following three consolidated reportable operating segments.

- Chemicals—Our chemicals segment is operated through our majority control of Kronos. Kronos is a leading global producer and marketer of value-added titanium dioxide pigments ("TiO_2"), TiO_2 is used to impart whiteness, brightness, opacity and durability to a wide variety of products, including paints, plastics, paper, fibers and ceramics. Additionally, TiO_2 is a critical component of everyday applications, such as coatings, plastics and paper, as well as many specialty products such as inks, foods and cosmetics. See Note 7.

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Component Products—We operate in the component products industry through our majority control of CompX. CompX is a leading manufacturer of engineered components utilized in a variety of applications and industries. CompX manufactures engineered components that are sold to a variety of industries including recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare, gas stations and vending equipment. All of CompX production facilities are in the United States. Prior to December, 2012 CompX also manufactured slides, pulls and ergonomic supports. See Note 3.

- Waste Management—WCS is our subsidiary which operates a West Texas facility for the processing, treatment, storage and disposal of a broad range of low-level radioactive, hazardous, toxic and other wastes. WCS obtained a byproduct disposal license in 2008 and began disposal operations at this facility in October 2009. WCS received a low-level radioactive waste ("LLRW")

disposal license in September 2009. The Compact LLRW commenced operations in 2012 and the Federal LLRW commenced operations in 2013.

We evaluate segment performance based on segment operating income, which we define as income before income taxes and interest expense, exclusive of certain non-recurring items (such as gains or losses on disposition of business units and other long-lived assets outside the ordinary course of business and certain legal settlements) and certain general corporate income and expense items (including securities transactions gains and losses and interest and dividend income), which are not attributable to the operations of the reportable operating segments. The accounting policies of our reportable operating segments are the same as those described in Note 1. Segment results we report may differ from amounts separately reported by our various subsidiaries and affiliates due to purchase accounting adjustments and related amortization or differences in how we define operating income. Intersegment sales are not material.

Interest income included in the calculation of segment operating income is not material in 2011, 2012 or 2013. Capital expenditures include additions to property and equipment but exclude amounts we paid for business units acquired in business combinations. Depreciation and amortization related to each reportable operating segment includes amortization of any intangible assets attributable to the segment. Amortization of deferred financing costs and any premium or discount associated with the issuance of indebtedness is included in interest expense.

Segment assets are comprised of all assets attributable to each reportable operating segment, including goodwill and other intangible assets. Our investment in the TiO_2 manufacturing joint venture (see Note 7) is included in the Chemicals Segment assets. Corporate assets are not attributable to any operating segment and consist principally of cash and cash equivalents, restricted cash equivalents, marketable securities and land held for development. At December 31, 2013, approximately 10% of corporate assets were held by NL (in 2012 the percentage was 15%), with substantially all of the remainder held directly by Valhi, BMI and Landwell.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net sales:			
Chemicals	$1,943.3	$1,976.3	$1,732.4
Component products	79.8	83.2	92.0
Waste management	2.0	27.8	39.2
Total net sales	$2,025.1	$2,087.3	$1,863.6
Cost of sales:			
Chemicals	$1,197.5	$1,418.2	$1,622.6
Component products	55.6	58.9	64.5
Waste management	25.3	35.0	42.3
Total cost of sales	$1,278.4	$1,512.1	$1,729.4
Gross margin:			
Chemicals	$745.8	$558.1	$109.8
Component products	24.2	24.3	27.5
Waste management	(23.3)	(7.2)	(3.1)
Total gross margin	$746.7	$575.2	$134.2
Operating income (loss):			
Chemicals	$553.0	$366.8	$(125.4)
Component products	6.4	5.4	9.3
Waste management	(38.0)	(26.8)	(22.6)
Total operating income (loss)	521.4	345.4	(138.7)
Equity in earnings of joint venture	(.5)	(.2)	.5
General corporate items:			
Securities earnings	28.6	50.2	26.6
Insurance recoveries	16.9	3.3	9.4
Litigation settlement gain	—	14.7	—
Gain on sale of excess property	—	3.2	—
Goodwill impairment	—	(6.4)	—
Gain on bargain purchase and remeasurement of existing investment in acquiree	—	—	54.6
General expenses, net	(40.7)	(45.3)	(105.3)
Loss on prepayment of debt, net	(3.1)	(7.2)	(8.9)
Interest expense	(61.8)	(56.3)	(56.1)
Income (loss) from continuing operations before income taxes	$460.8	$301.4	$(217.9)

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Depreciation and amortization:			
Chemicals	$50.2	$50.4	$52.8
Component products*	6.8	5.8	3.3
Waste management	6.8	13.2	18.4
Total	$63.8	$69.4	$74.5
Capital expenditures:			
Chemicals	$68.6	$74.9	$67.6
Component products*	3.2	4.3	3.5
Waste management	74.3	19.6	3.5
Corporate	.1	—	—
Total	$146.2	$98.8	$74.6

	December 31,		
	2011	2012	2013
	(In millions)		
Total assets:			
Operating segments:			
Chemicals	$2,189.7	$2,401.1	$1,984.8
Component products**	141.4	82.3	83.1
Waste management	223.4	265.0	270.1
Joint venture accounted for by the equity method	16.5	16.2	—
Corporate and eliminations	267.0	405.9	629.2
Total	$2,838.0	$3,170.5	$2,967.2

*Includes discontinued operations for 2011 and 2012, see Note 3.

**Includes discontinued operations for 2011, see Note 3.

Geographic information. We attribute net sales to the place of manufacture (point-of-origin) and the location of the customer (point-of-destination); we attribute property and equipment to their physical location. At December 31, 2013 the net assets of our non-U.S. subsidiaries included in consolidated net assets approximated $708 million (in 2012 the total was $775 million).

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net sales—point of origin:			
United States	$831.4	$1,153.8	$961.5
Germany	1,039.7	977.7	915.8
Canada	301.7	339.1	246.5
Norway	245.1	284.0	261.3
Belgium	301.8	272.9	254.6

Eliminations	(694.6)	(940.2)	(776.1)
Total	$2,025.1	$2,087.3	$1,863.6
Net sales—point of destination:			
North America	$578.2	$760.7	$690.5
Europe	1,141.3	1,011.4	905.0
Asia and other	305.6	315.2	268.1
Total	$2,025.1	$2,087.3	$1,863.6

	December 31,		
	2011	2012	2013
	(In millions)		
Net property and equipment:			
United States**	$189.0	$211.9	$232.8
Germany	259.6	271.2	292.9
Canada**	80.0	73.0	67.1
Norway	101.5	109.5	100.9
Belgium	86.0	97.5	102.7
Taiwan**	7.7	—	—
Total	$723.8	$763.1	$796.4

**Includes discontinued operations for 2011, see Note 3.

Note 3—Business combinations, discontinued operations and related transactions:

Kronos Worldwide, Inc.

Prior to 2011, Kronos' board of directors authorized the repurchase of up to 2.0 million shares of its common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. Kronos may repurchase its common stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, Kronos may terminate the program prior to its completion. Kronos will use cash on hand to acquire the shares. Repurchased shares will be added to Kronos' treasury and cancelled. During 2013 Kronos repurchased approximately 49,000 shares for an aggregate of $.7 million under its repurchase program. The 2013 purchases are the only purchases Kronos has made to date under the plan and at December 31, 2013 approximately 1.95 million shares are available for repurchase.

CompX International Inc.

Prior to 2011, CompX's board of directors authorized various repurchases of its Class A common stock in open market transactions, including block purchases, or in privately-negotiated transactions at unspecified prices and over an unspecified period of time. CompX may repurchase its common stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, CompX may terminate the program prior to its completion. CompX will generally use cash on hand to acquire the shares. Repurchased shares will be added to CompX's treasury and cancelled. CompX did not make any repurchases under the plan during 2011, 2012 and 2013, and at December 31, 2013 approximately 678,000 shares were available for purchase under these authorizations.

Discontinued operations—On December 28, 2012, CompX completed the sale of its furniture components operations to a competitor of that business for proceeds, net of expenses, of approximately $58.0 million in cash. We recognized a pre-tax gain in 2012 of $23.7 million on the disposal of these operations ($15.7 million, or $.05 per basic and diluted share, net of income taxes and noncontrolling interest, as shown in the table below). Such pre-tax gain includes income of $10.4 million associated with the reclassification out of accumulated other comprehensive income related to foreign currency translation. The income taxes associated with the pre-tax gain on disposal is less than the U.S. statutory income tax rate of 35% principally due to the utilization of foreign tax credits, the benefit of which had previously not been recognized in part because such benefit did not meet the "more-likely-than-not" recognition criteria

and in part because we have not previously elected to claim a credit with respect to foreign income taxes paid because our tax elections are consistent with the elections of Contran and Contran had not previously elected to claim credit. The furniture components operations primarily sold products with lower average margins and higher commodity raw material content than other operations of CompX's business. We believe disposing of this business enables us to focus more effort on continuing to develop the remaining portion of CompX's business that we believe has greater opportunity for higher returns and with less volatility in the cost of commodity raw materials.

Selected financial data for the operations of the disposed furniture Components business is presented below:

	Years ended December 31,	
	2011	2012
	(In millions)	
Income statement:		
Net sales	$ 59.0	$ 60.7
Operating income	$ 9.1	$ 7.4
Income from discontinued operations:		
Income before taxes	$ 9.1	$ 7.2
Income tax expense	5.0	3.5
Income from discontinued operations, net of tax	4.1	3.7
Gain on sale of discontinued operations:		
Gain on sale	—	23.7
Income tax expense	—	1.9
Gain on sale discontinued operations, net of tax	—	21.8
Total discontinued operations, net of tax	4.1	25.5
Noncontrolling interest in income from discontinued operations	1.1	1.0
Noncontrolling interest in gain on sale of discontinued operations	—	6.1
Total noncontrolling interest in discontinued operations	1.1	7.1
Total discontinued operations, net of tax and noncontrolling interest	$ 3.0	$ 18.4

In accordance with generally accepted accounting principles, the assets and liabilities relating to the furniture components business were eliminated from our 2012 Consolidated Balance Sheet at the date of sale. We have reclassified our Consolidated Statements of Operations to reflect the disposed business as discontinued operations for all periods presented. We have not reclassified our December 31, 2011 or 2012 Consolidated Statements of Cash Flows to reflect discontinued operations.

In conjunction with the sale of CompX's furniture components reporting unit, the buyer was not interested in retaining certain undeveloped land located in Taiwan owned by CompX's Taiwanese Furniture Component subsidiary. We had no additional use for the undeveloped land in Taiwan and therefore expected the land to be sold to a third party with CompX receiving the net proceeds. Based on the legal form of how we completed the disposal transaction, our interest in the land was represented by a $3.0 million promissory note receivable at December 31, 2012, issued to CompX by its former Taiwanese subsidiary which retained legal ownership in the land to facilitate the future sale of the land to a third party. The proceeds from the sale of the land were required to be used to settle the note receivable. Such note receivable was classified as part of other current assets in our Consolidated Balance Sheet at December 31, 2012. In 2013 the land was sold to a third party for $3.0 million.

Basic Management, Inc. and The Landwell Company

Prior to December 2013, we owned a 32% interest in BMI, which among other things provides utility services to an industrial park located in Henderson, NV, and is responsible for the delivery of water to the city of Henderson and various other users through a water distribution system owned by BMI. We also had a 12% interest in Landwell, which is actively engaged in efforts to develop certain real estate in Henderson, Nevada. BMI owns an additional 50% interest in Landwell. We accounted for our 32% interest in BMI and Landwell by the equity method of accounting. See Note 7. Three other entities owned the remaining ownership interest in BMI (a 32% interest, a 31%

interest and a 5% interest) and Landwell (a 21% interest, a 15% interest and a 2% interest). Provisions in the governing documents of BMI and Landwell give BMI and Landwell and their owners a right of first refusal upon any proposed transfer of an ownership interest in BMI and Landwell.

Prior to November 2010, the 31% ownership interest in BMI and the 15% ownership interest in Landwell indicated above were held by Tronox Incorporated, which among other things conducted operations at the Henderson industrial complex. Tronox filed for bankruptcy protection in January 2009. As part of Tronox' plan of

reorganization, in November 2010 such BMI and Landwell interests were transferred to the Nevada Environmental Response Trust ("NERT"), with the consent of BMI and Landwell and its owners (including us), and the parties agreed to negotiate to establish the price at which such BMI and Landwell interests would be transferred to BMI and Landwell or their owners. Such negotiations continued until February 2012, when the parties reached agreement as to the basic monetary terms of such transfer. Further negotiations over all of the terms and conditions of a definitive agreement continued until December 2013, when the parties reached agreement as to all terms and conditions, including the fact that we would acquire the BMI and Landwell interests formerly owned by Tronox, with the consent of BMI and Landwell and their other owners (who elected not to exercise their right-of-first-refusal rights).

As a result, in December 2013 we completed the acquisition of the 31% ownership interest in BMI and the 15% ownership interest in Landwell held by NERT. We completed this acquisition because it allowed us to obtain control of BMI and Landwell (with the consent of BMI and Landwell and their other owners), which increased our direct ownership interest of BMI to 63% and our direct ownership of Landwell to 27%, which also resulted in our control of 77% of Landwell (given BMI's 50% ownership interest in Landwell our controlling ownership of BMI and our 27% direct ownership of Landwell). The other owners did not exercise their first refusal or participation rights and accordingly did not participate in the acquisition of the additional interest of the BMI and Landwell interests. As part of this transaction with NERT, we also acquired one parcel of real property located in Henderson, and acquired an option to purchase four additional parcels of real property located in Henderson, at our option, without the payment of additional consideration to NERT. These five additional parcels, which NERT had also acquired as part of Tronox' plan of reorganization, are not part of the land currently being developed by Landwell but are located in or are adjacent to the industrial park. The aggregate fair value of the total consideration we gave for the acquisition of BMI and Landwell interest, the parcel of real property acquired and the option to acquire the four other parcels was $32.6 million consisting of $5.3 million in cash, a $19.1 million promissory note secured by the real property acquired, and a $11.1 million deferred payment obligation (which was discounted to present value of $8.2 million, as discussed below). The acquisition of the BMI and Landwell interests, the parcel of real property and the option for the four additional parcels is accounted for as a business combination under GAAP. The application of the purchase method of accounting for business combinations requires us to use significant estimates and assumptions in the determination of the estimated fair value of assets acquired and liabilities assumed; it also requires us to remeasure our existing ownership interest in BMI and Landwell to their estimated fair value. Our estimates of the fair values of assets acquired and liabilities assumed are based upon assumptions we believe are reasonable, and when appropriate, includes assistance from independent third-party valuation firms.

The $19.1 million promissory note bears interest at 3% per annum, with interest payable annually and all principal due in December 2023. The promissory note is collateralized by the BMI and Landwell interests acquired as well as the real property acquired as part of the transaction. The note may be prepaid at any time, without penalty. We must make mandatory prepayments on the note in specified amounts whenever we receive distributions from BMI or Landwell, or in the event we sell any of the real property acquired. The acquisition date estimated fair value of this promissory note is equal to its $19.1 million face amount.

The $11.1 million deferred payment obligation bears interest at 3% per annum, commencing in December 2023, and is collateralized by the BMI and Landwell interests acquired. The deferred payment obligation has no specified maturity date. We are required to make repayments on the deferred payment obligation, in specified amounts, whenever we receive distributions from BMI and Landwell, and we may make voluntary repayments on the deferred payment obligation at any time, in each case without any penalty, but in any case only after the promissory note discussed above has been repaid in full. For financial reporting purposes, the acquisition date estimated fair value of the deferred payment obligation is approximately $8.2 million, which was determined by discounting the $11.1 million face amount to its present value using a 3% discount rate from December 2023 (when it becomes interest bearing at 3%).

Upon gaining ownership of the BMI and Landwell interests formerly held by Tronox in 2010, NERT concluded that it would not be appropriate to take part in any corporate activities of BMI and Landwell, due to (i) the inherent conflict of interest associated with the fact that NERT was responsible to the Nevada Department of Environmental Protection with respect to the remediation of property NERT had acquired as a result of the Tronox plan of reorganization (including the five parcels of real property discussed above as well as other real property formerly owned by Tronox in Nevada), (ii) BMI and Landwell were involved in certain environmental remediation activities associated with the real property owned by Landwell which was under development, and (iii) NERT was also charged with maximizing the value of its assets, including the interests in BMI and Landwell as well as the real property it held directly. Accordingly, NERT never appointed any representatives to the board of directors of BMI,

representatives of NERT never attended any BMI and Landwell board meetings, and at NERT's request NERT was not provided any financial statements or other information regarding BMI and Landwell and their respective activities. In addition NERT (which received some cash and other assets at its formation as part of the Tronox plan of reorganization and also received the BMI/Landwell interests as well as the real property formerly owned by Tronox) knew it would need to raise funds in order to continue the environmental remediation obligation it assumed as part of its formation because the cash it received at its formation was substantially less than the amount it would need in order to continue such remediation. We believe that due to these conflicts and its desire to raise cash, NERT determined it needed to divest itself of the BMI and Landwell interests as soon as was practicable. And given the provisions of the governing documents of BMI and Landwell that gave BMI and Landwell and their other owners a right-of-first-refusal, there were a limited number of potential buyers for the BMI and Landwell interests held by NERT.

For financial reporting purposes, the assets acquired and liabilities assumed of BMI and Landwell have been included in our Consolidated Balance Sheet as of December 31, 2013, and the results of the operations and cash flows of BMI and Landwell will be included in our Consolidated Statement of Operations and Cash Flows beginning January 1, 2014. Our costs associated with the acquisition are not material.

We remeasured our existing ownership interests in BMI and Landwell to their estimated fair value at the acquisition date in accordance with ASC 805-10-25, for a business combination which occurs in stages (because we previously had an ownership interest in BMI and Landwell). As a result of such remeasurement, we recognized a pre-tax gain of $26.6 million in December 2013, representing the difference between the $43.4 million estimated fair value of our existing ownership interests in BMI and Landwell at the acquisition date and their aggregate $16.8 million carrying value at the acquisition date. Such pre-tax gain is included in part of "Other income, net" in our Consolidated Statement of Operations and is part of the line item captioned "Gain on bargain purchase and remeasurement of our existing investment in acquiree" in Note 15.

Under ASC 805-30-25, a "bargain purchase" occurs when the acquisition-date amounts for the identifiable net assets acquired (measured as required by applicable GAAP) exceeds the sum of (i) the fair value of the consideration transferred to gain control of the acquiree, (ii) the fair value of any previously-held ownership interests in the acquiree and (iii) the fair value of any noncontrolling interest in the acquiree that exits at the acquisition date. If a bargain purchase is initially identified, the acquirer is to reassess whether all of the assets acquired and liabilities assumed have been appropriately identified, recognized and measured, and whether the fair value of the consideration transferred, previously-held ownership interests and noncontrolling interests that exist at the acquisition date have been appropriately measured. If after this reassessment, if a bargain purchase is still indicated, it is recognized as a gain in earnings. After performing such reassessment with respect to this acquisition, we determined a bargain purchase exists. We believe this acquisition gave rise to a bargain purchase because of NERT's decision to sell the BMI and Landwell interests it acquired as part of the Tronox plan of reorganization (for the reasons discussed above), the right-of-first-refusal rights granted to BMI and Landwell and their owners under the governing documents of BMI and Landwell and the time (22 months) it took to reach agreement on the terms and conditions of a definitive agreement after reaching agreement on the basic monetary terms. This preliminary bargain purchase gain aggregated $28.0 million, and is included in part of "Other Income, net" in our Consolidated Statement of Operations and is part of the line item captioned "Gain on bargain purchase and remeasurement of our existing investment in acquiree" in Note 15.

The following table summarizes the aggregate fair value of the consideration we paid to gain control of BMI and Landwell, the one parcel of real property acquired and the option to acquire the remaining four parcels of real property (which collectively are estimated to have a fair value of $14.9 million), and our current estimates for the fair value of our existing ownership interests in BMI and Landwell, the gain on bargain purchase recognized, the amounts assigned to the identifiable assets acquired and liabilities assumed at the acquisition date and the fair value of the

noncontrolling interest in BMI and Landwell that exists as the acquisition date. The purchase price allocation for BMI and Landwell indicated below is preliminary and is subject to further refinement as management's estimates of the valuation of certain assets acquired and liabilities assumed, including but not limited to the land held for development, certain property, plant and equipment, is not yet completed pending the final independent fair value appraisal. Accordingly, the amounts we ultimately assign to the assets acquired and liabilities assumed and the noncontrolling interest in BMI and Landwell at the acquisition date may change, and the amount of the gain we recognized from remeasurement of our existing ownership interest in BMI and Landwell, and the bargain purchase gain we recognized, may similarly change once our preliminary purchase allocation is finalized. Any such change in the amount of the gain from remeasurement and the bargain purchase gain recognized would be accounted for

retrospectively, in accordance with ASC 805-10-25. Our final purchase price allocation will be based upon an independent appraisal of the assets acquired and liabilities assumed of BMI and Landwell, including the fair value of the noncontrolling interest in BMI and Landwell at the acquisition date, using the fair value measurement principles of ASC 820. Such independent appraisal is considered a Level III input under ASC 820.

Based on our preliminary analysis of the provisional amounts of the transaction at December 31, 2013 we recognized the following:

	(In millions)
Consideration:	
Cash	$ 5.3
Promissory note payable	19.1
Deferred payment, obligation ($11.1 million face value)	8.2
Total fair value of consideration	32.6
Fair value of existing equity interest in BMI and Landwell	43.4
Bargain purchase gain recognized	28.0
Preliminary total	$ 104.0
Preliminary allocation of purchase price to identifiable assets acquired and liabilities assumed:	
Cash	$ 27.4
Land held for development:	
Current	14.3
Noncurrent	158.1
Other current assets	9.4
Property, plant and equipment	29.0
Other noncurrent assets	8.5
Long-term debt	(14.3)
Other liabilities	(66.9)
Total net identifiable assets	165.5
Noncontrolling interest in BMI and Landwell	(61.5)
Preliminary total	$ 104.0

The pro forma effect on our Consolidated Statement of Operations for 2013 and 2012, assuming the acquisition of BMI and Landwell had occurred at the beginning of such periods, is not material.

Note 4—Marketable securities:

	Market value	Cost basis	Unrealized gains, net
	(In millions)		
December 31, 2012:			
Current assets	$.9	$.9	$ —
Noncurrent assets:			
The Amalgamated Sugar Company LLC	$250.0	$250.0	$ —
Other	6.8	6.7	.1
Total	$256.8	$256.7	$ .1
December 31, 2013:			
Current assets	$3.8	$3.8	$ —
Noncurrent assets:			
The Amalgamated Sugar Company LLC	$250.0	$250.0	$ —
Other	3.3	3.3	—
Total	$253.3	$253.3	$ —

	Fair Value Measurements			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
December 31, 2012:				
Current assets	$.9	$ —	$ .9	$ —
Noncurrent assets:				
The Amalgamated Sugar Company LLC	$250.0	$ —	$ —	$ 250.0
Mutual funds and common stocks	6.8	3.5	3.3	—
Total	$256.8	$ 3.5	$ 3.3	$ 250.0
December 31, 2013:				
Current assets	$3.8	$ 2.4	$ 1.4	$ —
Noncurrent assets:				
The Amalgamated Sugar Company LLC	$250.0	$ —	$ —	$ 250.0
Fixed income securities	1.9	—	1.9	—
Mutual funds and common stocks	1.4	1.4	—	—
Total	$253.3	$ 1.4	$ 1.9	$ 250.0

Amalgamated Sugar. Prior to 2011, we transferred control of the refined sugar operations previously conducted by our wholly-owned subsidiary, The Amalgamated Sugar Company, to Snake River Sugar Company, an Oregon agricultural cooperative formed by certain sugar beet growers in Amalgamated's areas of operations. Pursuant to the transaction, we contributed substantially all of the net assets of our refined sugar operations to The Amalgamated Sugar Company LLC, a limited liability company controlled by Snake River, on a tax-deferred basis in exchange for a non-voting ownership interest in the LLC. The cost basis of the net assets we transferred to the LLC was approximately $34 million. When we transferred control of our operations to Snake River in return for our interest in the LLC, we

recognized a gain in earnings equal to the difference between $250 million (the fair value of our investment in the LLC as evidenced by its $250 million redemption price, as discussed below) and the $34 million cost basis of the net assets we contributed to the LLC, net of applicable deferred income taxes. Therefore, the cost basis of our investment in the LLC is $250 million. As part of this transaction, Snake River made certain loans to us aggregating $250 million. These loans are collateralized by our interest in the LLC. See Notes 9 and 15.

We and Snake River share in distributions from the LLC up to an aggregate of $26.7 million per year (the “base” level), with a preferential 95% share going to us. To the extent the LLC’s distributions are below this base level in any given year, we are entitled to an additional 95% preferential share of any future annual LLC

distributions in excess of the base level until the shortfall is recovered. Under certain conditions, we are entitled to receive additional cash distributions from the LLC. At our option, we may require the LLC to redeem our interest in the LLC, and the LLC has the right to redeem, at their option, our interest in the LLC beginning in 2027. The redemption price is generally $250 million plus the amount of certain undistributed income allocable to us. If we require the LLC to redeem our interest in the LLC, Snake River has the right to accelerate the maturity of and call our $250 million loans from Snake River.

The LLC Company Agreement contains certain restrictive covenants intended to protect our interest in the LLC, including limitations on capital expenditures and additional indebtedness of the LLC. We also have the ability to temporarily take control of the LLC if our cumulative distributions from the LLC fall below specified levels, subject to satisfaction of certain conditions imposed by Snake River's current third-party senior lenders.

Prior to 2011, Snake River agreed that the annual amount of distributions we receive from the LLC would exceed the annual amount of interest payments we owe to Snake River on our $250 million in loans from Snake River by at least $1.8 million. If we receive less than the required minimum amount, certain agreements we previously made with Snake River and the LLC, including a reduction in the amount of cumulative distributions that we must receive from the LLC in order to prevent us from becoming able to temporarily take control of the LLC, would retroactively become null and void and we would be able to temporarily take control of the LLC if we so desired. Through December 31, 2013, Snake River and the LLC maintained the applicable minimum required levels of cash flows to us.

We report the cash distributions received from the LLC as dividend income. We recognize distributions when they are declared by the LLC, which is generally the same month we receive them, although in certain cases distributions may be paid on the first business day of the following month. See Note 15. The amount of such future distributions we will receive from the LLC is dependent upon, among other things, the future performance of the LLC's operations. Because we receive preferential distributions from the LLC and we have the right to require the LLC to redeem our interest for a fixed and determinable amount beginning at a fixed and determinable date, we account for our investment in the LLC as a marketable security carried at its cost basis of $250 million. The cost basis is also the fair value of our investment determined using Level 3 inputs as the $250 million redemption price of our investment in the LLC as well as the amount of our debt owed to Snake River Company that is collateralized by our investment in the LLC. There has been no change to the fair value of our Amalgamated Sugar investment during 2011, 2012 or 2013. We do not expect to report a gain on the redemption at the time our LLC interest is redeemed, as the redemption price of $250 million is expected to equal the carrying value of our investment in the LLC at the time of redemption.

Other. The fair value of our other marketable securities are either determined using Level 1 inputs (because the securities are actively traded) or determined using Level 2 inputs (because although these securities are traded, in many cases the market is not active and the year-end valuation is generally based on the last trade of the year, which may be several days prior to December 31).

Note 5—Accounts and other receivables, net:

	December 31,	
	2012	2013
	(In millions)	
Trade accounts receivable:		
Kronos	$229.7	$226.1

CompX	8.7	8.7
WCS	4.8	7.2
VAT and other receivables	42.2	32.7
Allowance for doubtful accounts	(1.5)	(1.3)
Total	$283.9	$273.4

Note 6—Inventories, net:

	December 31,	
	2012	2013
	(In millions)	
Raw materials:		
Chemicals	$151.5	$66.6
Component products	3.3	3.6
Total raw materials	154.8	70.2
Work in process:		
Chemicals	27.3	18.0
Component products	5.9	6.7
Total in-process products	33.2	24.7
Finished products:		
Chemicals	395.6	263.3
Component products	2.1	3.0
Total finished products	397.7	266.3
Supplies (chemicals)	64.6	69.4
Total	$650.3	$430.6

Note 7—Investment in affiliates and other assets:

	December 31,	
	2012	2013
	(In millions)	
Investment in affiliates:		
$Ti0_2$ manufacturing joint venture	$109.9	$102.3
BMI and Landwell	16.2	—
Total	$126.1	$102.3
Other assets:		
Land held for development	$—	$158.1
Waste disposal site operating permits, net	65.7	59.5
Restricted cash	20.9	33.3
IBNR receivables	6.7	6.9
Capital lease deposit	6.2	6.2
Intangible assets	.2	5.2
Deferred financing costs	7.0	2.6
Assets held for sale	2.6	1.1
Other	46.7	63.8
Total	$156.0	$336.7

Investment in TiO_2 manufacturing joint venture. Our Chemicals Segment and another $Ti0_2$ producer, Tioxide Americas LLC (“Tioxide”), are equal owners of a manufacturing joint venture (Louisiana Pigment Company, L.P., or “LPC”) that owns and operates a TiO_2 plant in Louisiana. Tioxide is a wholly-owned subsidiary of Huntsman Corporation.

We and Tioxide are both required to purchase one-half of the TiO_2 produced by LPC, unless we and Tioxide agree otherwise (such as in 2012, when we purchased approximately 52% of the production from the plant). LPC operates on a break-even basis and, accordingly, we report no equity in earnings of LPC. Each owner's acquisition transfer price for its share of the TiO_2 produced is equal to its share of the joint venture's production costs and interest expense, if any. Our share of net cost is reported as cost of sales as the related TiO_2 acquired from LPC is sold. We report distributions we receive from LPC, which generally relate to excess cash generated by LPC from its non-cash production costs, and contributions we make to LPC, which generally relate to cash required by LPC when it builds working capital, as part of our cash flows from operating activities in our Consolidated Statements of Cash Flows. The components of our net distributions (contributions) from LPC are shown in the table below.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Distributions from LPC	$29.7	$79.5	$70.7
Contributions to LPC	(25.9)	(100.2)	(59.8)
Net distributions (contributions)	$3.8	$(20.7)	$10.9

Summary balance sheets of LPC are shown below:

	December 31,	
	2012	2013
	(In millions)	
ASSETS		
Current assets	$139.8	$127.2
Property and equipment, net	126.0	114.1
Total assets	$265.8	$241.3
LIABILITIES AND PARTNERS' EQUITY		
Other liabilities, primarily current	$43.2	$33.9
Partners' equity	222.6	207.4
Total liabilities and partners' equity	$265.8	$241.3

Summary income statements of LPC are shown below:

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Revenues and other income:			
Kronos	$144.8	$250.2	$224.5
Tioxide	145.7	227.5	224.6
Total	290.5	477.7	449.1
Cost and expenses:			
Cost of sales	290.1	477.3	448.7
General and administrative	.4	.4	.4

Total	290.5	477.7	449.1
Net income	$ —	$—	$—

Investment in Basic Management and Landwell. As discussed in Note 3, prior to December 2013 we owned a 32% interest in BMI and a 12% interest in Landwell. BMI owns an additional 50% interest in Landwell, and we accounted for our ownership interests in BMI and Landwell by the equity method of accounting. In December 2013, we acquired a controlling interest in BMI and Landwell, and we ceased to account for BMI and Landwell by the equity method and began to account for BMI and Landwell as a consolidated subsidiary. For federal income tax purposes Landwell is treated as a partnership, and accordingly the combined results of operations of BMI and Landwell include a provision for income taxes on Landwell's earnings only to the extent that such earnings accrue to BMI. We previously recorded our equity in earnings of BMI and Landwell on a one-quarter lag because their financial statements were generally not available to us on a timely basis. Upon gaining control of BMI and Landwell in December 2013, we eliminated the one-quarter lag by recognizing, in the fourth quarter of 2013, equity in earnings of BMI and Landwell attributable to the six-month period ended December 31, 2013. The effect of this one-quarter lag, as well as the effect of us recognizing five quarters of equity in earnings of BMI and Landwell in 2013, is not material to any period presented. Certain selected combined financial information of BMI and Landwell is summarized below. In addition, the combined revenues, income before income taxes and net income of BMI and Landwell for the three months ended December 31, 2013 is $15.9 million, $6.9 million and $5.3 million, respectively.

	September 30, 2012
	(In millions)
ASSETS	
Current assets	$ 25.7
Prepaid costs and other	11.6
Property and equipment, net	6.4
Investment in undeveloped land and water rights	42.0
Land and development costs	12.7
Total assets	$ 98.4
LIABILITIES AND EQUITY	
Current liabilities	$ 14.2
Long-term debt	14.3
Deferred income taxes	6.0
Other noncurrent liabilities	3.4
Equity	60.5
Total liabilities and equity	$ 98.4

	Twelve months ended September 30,		
	2011	2012	2013
	(In millions)		
Total revenues	$ 10.0	$ 10.4	$ 9.5
Loss before income taxes	(2.7)	(1.2)	(3.9)
Net loss	(2.1)	(1.4)	(3.7)

Land held for development. The land held for development relates to BMI and Landwell and is discussed in Notes 1 and 3.

Capitalized permit costs. We obtained our byproducts disposal license in 2008 and began amortizing such license when the byproduct disposal facility began operations in October 2009. We obtained our low-level radioactive waste ("LLRW") license in September 2009. Our LLRW facilities commenced operations in 2012, at which time we began

amortizing such license. Amortization of capitalized operating permit costs was $1.3 million in 2011, $4.9 million in 2012 and $6.5 million in 2013. Our estimated aggregate amortization expense for all our of capitalized permit costs as of December 31, 2013 is approximately $6.7 million in each of 2014 through 2018. Capitalized permit costs are stated net of accumulated amortization of $11.8 million at December 31, 2012 and $18.8 million at December 31, 2013. The components of net capitalized permit costs are presented in the table below.

	December 31,	
	2012	2013
	(In millions)	
Net permit costs for:		
Pending renewals of prior permits	$.2	$—
Issued permits which are being amortized:		
LLRW license (expires in 2024)	58.3	54.0
Byproduct license (expires in 2018)	5.6	4.6
Other (expires 2014 - 2024)	1.6	.9
Total pending renewals and issued permits which are being amortized	$65.7	$59.5

Assets held for sale. Prior to 2012, our assets held for sale consisted primarily of two facilities (land, building, and building improvements) and certain unimproved land, all of which were formerly used in Component Products Segment's operations. These assets were classified as "assets held for sale" when they ceased to be used in our operations and met all of the applicable criteria under GAAP. During 2012 we obtained updated independent appraisals of the significant assets. Based on these appraisals, we recognized write-downs in the third quarter aggregating $.4 million to reduce the carrying value of the assets to their estimated fair value less cost to sell. Subsequently we sold the one of the facilities in December 2012 for net proceeds of $3.6 million, which net proceeds were less than the carrying amount of the assets and we therefore recognized a loss on the sale of the facility of approximately $.8 million during the fourth quarter of 2012.

In 2013 CompX sold its remaining facility for net proceeds of $1.6 million which approximated the carrying value of the assets as of the date of the sale.

We also recognized asset held for sale write-downs aggregating $1.1 million in 2011 related to these properties, associated with obtaining updated appraisals on the properties. These appraisals represent a Level 2 input as defined by ASC 820-10-35.

Other. We have certain related party transactions with LPC and Basic Management, as more fully described in Note 16.

The IBNR receivables relate to certain insurance liabilities, the risk of which we have reinsured with certain third party insurance carriers. We report the insurance liabilities related to these IBNR receivables which have been reinsured as part of noncurrent accrued insurance claims and expenses. Certain of our insurance liabilities are classified as current liabilities and the related IBNR receivables are classified with other current assets. See Notes 10 and 16.

Restricted cash relates primarily relates to our Chemicals (see Notes 9 and 12) and Waste Management Segments (see Note 17).

The capital lease deposit relates to certain indebtedness of our Waste Management Segment and is discussed in Note 9.

Note 8—Goodwill:

Changes in the carrying amount of goodwill during the past three years by operating segment are presented in the table below. Goodwill acquired in 2011 relates to discontinued operations, see Note 3.

	Operating segment			
	Chemicals	Component Products	EWI	Total
	(In millions)			
Balance at December 31, 2010	$352.6	$ 38.4	$6.4	$397.4
Changes in foreign exchange rates	—	(.4)	—	(.4)
Goodwill acquired	—	3.1	—	3.1
Balance at December 31, 2011	352.6	41.1	6.4	400.1
Sale of discontinued operations	—	(14.3)	—	(14.3)
Goodwill impairment	—	—	(6.4)	(6.4)
Changes in foreign exchange rates	—	.3	—	.3
Balance at December 31, 2012 and 2013	$ 352.6	$ 27.1	$ —	$379.7

We have assigned goodwill to each of our reporting units (as that term is defined in ASC Topic 350-20-20, Goodwill) which corresponds to our operating segments. All of our goodwill related to our Chemicals Segment was generated prior to 2011 from our various step acquisitions of NL and Kronos, as goodwill was determined prior to the adoption of the equity transaction framework provisions of ASC Topic 810. Substantially all of the net goodwill related to the Component Products Segment was generated from CompX's acquisitions of certain business units and the step acquisitions of CompX. The Component Products Segment goodwill is assigned to the two reporting units within that operating segment: security products and furniture components. Prior to December 31, 2012, we also had approximately $6.4 million of goodwill which resulted from NL's acquisition of EWI Re, Inc., an insurance brokerage subsidiary. EWI brokers certain insurance policies for Contran and certain of its affiliates, including us and our subsidiaries, as well as for certain third parties. See Note 16.

We test for goodwill impairment at the reporting unit level. In determining the estimated fair value of the reporting units, we use appropriate valuation techniques, such as discounted cash flows and, with respect to our Chemicals Segment, we consider quoted market prices, a Level 1 input, while discounted cash flows are a Level 3 input. If the carrying amount of goodwill exceeds its implied fair value, an impairment charge is recorded. We review goodwill for each of our reporting units for impairment during the third quarter of each year or when circumstances arise that indicate an impairment might be present. If the fair value of an evaluated asset is less than its book value, the asset is written down to fair value. Prior to 2013, we used a quantitative assessment in determining the estimated fair value of our Component Products security products reporting unit, using appropriate valuation techniques such as discounted cash flows. Such discounted cash flows are a Level 3 input as defined by ASC 820-10-35. If the carrying amount of goodwill exceeds its implied fair value, an impairment charge is recorded. In 2013 we adopted the guidance in ASU No. 2011-08 for testing goodwill for impairment by assessing qualitative factors solely as it relates to our security products reporting unit, to determine whether it is necessary to perform the two-step quantitative goodwill impairment test.

We performed our annual goodwill impairment test in the third quarter of 2013 for each of our reporting units and concluded there was no impairment of the goodwill for those reporting units. Such impairment test as it relates to our security products reporting unit was based on our qualitative assessment, and as a result a quantitative assessment was not required for such reporting unit for 2013. We also tested our goodwill for impairment in connection with our annual goodwill impairment test during the third quarter of 2011 and 2012. No impairment was indicated as part of such 2011, 2012 or 2013 annual review of goodwill. However, as a result of the December 2012 disposition of CompX's furniture components reporting unit and the December 2012 sale of all common stock of TIMET owned by Contran Corporation and its affiliates (including us and our subsidiaries), a significant portion of EWI's insurance brokerage business was lost (including TIMET). Consequently, we reevaluated goodwill associated with EWI due to the triggering event caused by significant impact these dispositions had on EWI's business in December 2012, and concluded that all of our goodwill related to EWI was impaired. Accordingly, we recognized a $6.4 million goodwill impairment in December 2012. In addition, we had goodwill of approximately $14.3 million attributable to the

disposed CompX furniture components operations, see Note 3.

Prior to 2011, we recorded a $10.1 million goodwill impairment in our Component Products Segment. Our consolidated gross goodwill at December 31, 2013 is $396.2 million.

Note 9—Long-term debt:

	December 31,	
	2012	2013
	(In millions)	
Valhi:		
Snake River Sugar Company	$250.0	$250.0
Contran credit facility	157.6	206.5
Total Valhi debt	407.6	456.5
Subsidiary debt:		
Kronos:		
Note payable to Contran	—	170.0
Term loan	384.5	—
Revolving North American credit facility	—	11.1
Revolving European credit facility	13.2	—
CompX:		
Promissory note payable to TIMET	18.5	—
WCS:		
Financing capital lease	69.9	68.6
6% promissory notes	7.2	2.4
Tremont:		
Promissory note payable	—	19.1
BMI:		
Bank note payable	—	11.2
Landwell:		
Note payable to the City of Henderson	—	3.1
Other	9.2	10.5
Total subsidiary debt	502.5	296.0
Total debt	910.1	752.5
Less current maturities	29.6	10.7
Total long-term debt	$880.5	$741.8

Valhi —Snake River Sugar Company — Our $250 million in loans from Snake River Sugar Company are collateralized by our interest in The Amalgamated Sugar Company LLC. The loans bear interest at a weighted average fixed interest rate of 9.4% and are due in January 2027. At December 31, 2013, $37.5 million of the loans are recourse to us and the remaining $212.5 million is nonrecourse to us. Under certain conditions, Snake River has the ability to accelerate the maturity of these loans. See Note 4.

Contran credit facility— We also have an unsecured revolving credit facility with Contran which, as amended, provides for borrowings from Contran of up to $275 million. The facility, as amended, bears interest at prime plus 1% (4.25% at December 31, 2013), and is due on demand, but in any event no earlier than December 31, 2015. The facility contains no financial covenants or other financial restrictions. Valhi pays an unused commitment fee quarterly to Contran on the available balance (except during periods during which Contran would be a net borrower from Valhi). In December 2012, we borrowed $157.6 million under this facility and used the proceeds to repay an intercompany note with our Chemicals Segment (which note was eliminated in the preparation of our Consolidated Financial Statements). During 2013 we borrowed an additional $48.9 million and at December 31, 2013 an additional $68.5 million was available for borrowings.

Kronos—Term loan—In February 2013, Kronos voluntarily prepaid an aggregate $290 million principal amount of its term loan. We recognized a non-cash pre-tax interest charge of $6.6 million in the first of 2013 quarter related to this prepayment consisting of the write-off of the unamortized original issue discount costs and deferred financing costs associated with such prepayment. Funds for such prepayment were provided by $100 million of Kronos' cash on hand as well as borrowings of $190 million under a new loan from Contran as described below. In July 2013 Kronos voluntarily prepaid the remaining $100 million principal amount outstanding under its term loan, using $50 million of its cash on hand as well as borrowings of $50 million under its North American revolving credit facility. We recognized a non-cash pre-tax interest charge of $2.3 million in the third quarter of 2013 related to this prepayment consisting of the write-off of the unamortized original issue discount costs and deferred financing

costs associated with such prepayment. The average interest rate on the term loan for the year-to-date period ended July 30, 2013 (the payoff date) was 6.8%. The carrying value of the term loan at December 31, 2012 included unamortized original issue discount of $5.5 million.

In February 2014, Kronos entered into a new $350 million term loan. Kronos used $170 million of the net proceeds of the new term loan to prepay the outstanding principal balance of its note payable to Contran (along with accrued and unpaid interest through the prepayment date), and such note payable was cancelled. The term loan was issued at 99.5% of the principal amount, or an aggregate of $348.25 million. The remaining $172.8 million net proceeds of the term loan are available for our general corporate purposes. The new term loan:

- bears interest, at our option, at LIBOR (with LIBOR no less than 1.0%) plus 3.75%, or the base rate, as defined in the agreement, plus 2.75%;
- requires quarterly principal repayments of $875,000 commencing in June 2014, other mandatory principal repayments of formula-determined amounts under specified conditions with all remaining principal balance due in February 2020. Voluntary principal prepayments are permitted at any time, provided that a call premium of 1% of the principal amount of such prepayment applies to any voluntary prepayment made on or before February 2015 (there is no prepayment penalty applicable to any voluntary prepayment after February 2015);
- is collateralized by, among other things, a first priority lien on (i) 100% of the common stock of certain of Kronos' U.S. wholly-owned subsidiaries, (ii) 65% of the common stock or other ownership interest of Kronos' Canadian subsidiary (Kronos Canada, Inc.) and certain first-tier European subsidiaries (Kronos Titan GmbH and Kronos Denmark ApS) and (iii) a $395.7 million unsecured promissory note issued by Kronos' wholly-owned subsidiary, Kronos International, Inc. (KII) to Kronos';
- is also collateralized by a second priority lien on all of the U.S. assets which collateralize Kronos' new North American revolving facility, as discussed below;
- contains a number of covenants and restrictions which, among other things, restrict Kronos' ability to incur additional debt, incur liens, pay dividends or merge or consolidate with, or sell or transfer substantially all of Kronos' assets to, another entity, contains other provisions and restrictive covenants customary in lending transactions of this type (however, there are no ongoing financial maintenance covenants); and
- contains customary default provisions, including a default under any of Kronos' other indebtedness in excess of $50 million.

Note payable to Contran—As discussed above, in February 2013 Kronos entered into a promissory note with Contran. This new loan from Contran contained terms and conditions similar to the terms and conditions of the term loan, except that the loan from Contran was unsecured and contained no financial maintenance covenant. The independent members of Kronos' board of directors approved the terms and conditions of the loan from Contran. The note required quarterly principal payments of $5.0 million which commenced in March 2013, with any remaining outstanding principal due by June 2018. Voluntary principal prepayments were permitted at any time without penalty. The note bore interest at LIBOR (with LIBOR no less than 1%) plus 5.125%, or the base rate (as defined in the agreement) plus 4.125%. Kronos was required to use the base rate method until such time as both (1) the term loan discussed above had been fully repaid and (2) the European credit facility had terms satisfactory to Contran, at which time Kronos would have had the option to use either the base rate or LIBOR rate methods. In 2013, Kronos borrowed $190 million and subsequently repaid $20 million on the note. The average interest rate on these borrowings as of and for the period from issuance to December 31, 2013 was 7.375%. As discussed above, in February 2014 Kronos used $170 million of the proceeds from its new term loan and prepaid the remaining balance owed to Contran under this note payable, and the note payable to Contran was cancelled. In accordance with GAAP, since Kronos has refinanced the note payable to Contran with a portion of the net proceeds from its new term loan, current maturities of long-term debt at December 31, 2013, as it relates to the note payable to Contran, is based upon the required quarterly principal repayments of the new term loan.

Senior Secured Notes —In March 2011, Kronos redeemed €80 million of its €400 million 6.5% Senior Secured Notes at 102.17% of the principal amount for an aggregate of $115.7 million, including a $2.5 million call premium. During the third and fourth quarters of 2011, Kronos repurchased in open market transactions an

aggregate of €40.8 million principal amount of the Senior Notes for an aggregate of €40.6 million (an aggregate of $57.6 million when repurchased). Following such partial redemption and repurchases, €279.2 million principal amount of Senior Notes remained outstanding. We recognized a $3.3 million pre-tax interest charge related to the redemption of €80 million of the 6.5% Senior Secured Notes consisting of the call premium, the write-off of unamortized deferred financing costs and original issue discount associated with the redeemed Senior Notes. We recognized a $.2 million net gain on the €40.8 million principal amount of Senior Notes repurchased in open market transactions. We borrowed under our European revolving credit facility in order to fund the redemption in March 2011, while we used cash on hand to fund the open market repurchases.

Immediately upon the June 2012 issuance of Kronos' prior term loan discussed above, we sent a request to the trustee under the indenture for the Senior Notes, asking that all remaining €279.2 million principal amount outstanding of the Senior Notes be called for redemption on July 20, 2012. We also directed that a portion of the proceeds from the prior term loan be irrevocably sent to the trustee, in an amount sufficient to pay the principal, call premium at 1.01083% of the principal amount and all accrued and unpaid interest due through the July 20, 2012 redemption date. Upon the trustee's confirmation of receipt of such funds on June 14, 2012, the trustee discharged our obligations under the indenture and released the liens on all collateral thereunder. Because we were released as being the primary obligor under the indenture as of June 14, 2012, the Senior Notes were derecognized as of that date along with the funds irrevocably sent to the trustee to effect the July 20, 2012 redemption. We recognized an aggregate $7.2 million pre-tax charge related to the early extinguishment of debt in the second quarter of 2012, consisting of the call premium paid, interest from the June 14, 2012 indenture discharge date to the July 20, 2012 redemption date and the write-off of unamortized deferred financing costs and original issue discount associated with the redeemed Senior Notes.

Revolving North American credit facility—Also in June 2012, Kronos entered into a $125 million revolving bank credit facility which matures June 2017. Borrowings under the revolving credit facility are available for our general corporate purposes. Available borrowings on this facility are based on formula-determined amounts of eligible trade receivables and inventories, as defined in the agreement, of certain of Kronos' North American subsidiaries less any outstanding letters of credit up to $15 million issued under the facility (with revolving borrowings by Kronos' Canadian subsidiary limited to $25 million). Any amounts outstanding under the revolving credit facility bear interest, at Kronos' option, at LIBOR plus a margin ranging from 1.5% to 2.0% or at the applicable base rate, as defined in the agreement, plus a margin ranging from .5% to 1.0%. The credit facility is collateralized by, among other things, a first priority lien on the borrowers' trade receivables and inventories. The facility contains a number of covenants and restrictions which, among other things, restricts the borrowers' ability to incur additional debt, incur liens, pay dividends or merge or consolidate with, or sell or transfer all or substantially all of their assets to, another entity, contains other provisions and restrictive covenants customary in lending transactions of this type and under certain conditions requires the maintenance of a specified financial covenant 1.0 to 1.0. During 2013, Kronos borrowed $162.1 million and repaid an aggregate of $151.0 million under this facility. The average interest rate on these borrowings as of and for the period from borrowing to December 31, 2013 was 2.69% and 3.75%, respectively. At December 31, 2013 approximately $89.1 million was available for borrowing under this revolving facility.

Revolving European credit facility—Kronos' operating subsidiaries in Germany, Belgium, Norway and Denmark have a €120 million secured revolving bank credit facility that, matures in September 2017. Kronos may denominate borrowings in Euros, Norwegian kroner or U.S. dollars. Outstanding borrowings bear interest at LIBOR plus 1.90%. The facility is collateralized by the accounts receivable and inventories of the borrowers, plus a limited pledge of all of the other assets of the Belgian borrower. The facility contains certain restrictive covenants that, among other things, restrict the ability of the borrowers to incur debt, incur liens, pay dividends or merge or consolidate with, or sell or transfer all or substantially all of the assets to, another entity, and requires the maintenance of certain financial ratios. In addition, the credit facility contains customary cross-default provisions with respect to other debt and obligations of the borrowers, KII and its other subsidiaries.

During 2013, Kronos borrowed €10 million ($12.8 million when borrowed) and repaid the entire outstanding balance of €20 million ($26.5 million when repaid) under its European credit facility. The average interest rate on these borrowings for the year-to-date period ended August 31, 2013 when paid off was 2.02%. At December 31, 2013, there were no outstanding borrowings under this facility. Our European credit facility requires the maintenance of certain financial ratios. At September 30, 2013, and based on the earnings before income tax, interest, depreciation and amortization expense (EBITDA) of the borrowers, we would not have met the financial covenant test if the borrowers had any net debt outstanding. In December 2013, the lenders under Kronos'

European revolving credit facility granted a waiver until June 30, 2014 with respect to the financial test, but Kronos' ability to borrow any amounts under the facility is subject to the requirement that the borrowers maintain a specified level of EBITDA. At December 31, 2013 Kronos is in compliance with the minimum EBITDA set forth in the waiver, and our borrowing availability was 50% of the credit facility, or €60 million ($82.8 million). Effective January 1, 2014, per the waiver, Kronos' borrowing availability is 75% of the credit facility, or €90 million ($124.1 million).

Canada—In December 2011, Kronos' Canadian subsidiary entered into a Cdn. $10.0 million loan agreement with the Bank of Montreal for the limited purpose of issuing letters of credit. The facility renews annually. Letters of credit are collateralized by restricted deposits at the Bank of Montreal ($7.4 million at December 31, 2013). See Note 7. The facility contains certain restrictive covenants which, among other things, restrict the subsidiary from incurring additional indebtedness in excess of Cdn. $35 million. At December 31, 2013, an aggregate of Cdn. $7.9 million letters of credit were outstanding under this facility.

In December 2011, Kronos' Canadian subsidiary entered into an agreement with an economic development agency of the Province of Quebec, Canada pursuant to which we may borrow up to Cdn. $7.1 million from such agency. Borrowings may only be used to fund capital improvements at its Canadian plant and are limited to a specified percentage of such capital improvements. Borrowings are non-interest bearing, with monthly payments commencing in 2017. The agreement contains certain restrictive covenants, which, among other things, restricts the subsidiary's ability to sell assets or enter into mergers, and requires Kronos' subsidiary to maintain certain financial ratios and maintain specified levels of employment. At December 31, 2013 Kronos had Cdn. $1.8 million (USD $1.7 million) outstanding under this agreement.

CompX—Note payable to Timet Finance Management Company—Prior to 2011, CompX purchased and/or cancelled certain shares of its Class A common stock from Timet Finance Management Company ("TFMC"). TFMC is a wholly-owned subsidiary of Titanium Metals Corporation, which was one of our affiliates until December 20, 2012. CompX paid for the shares acquired in the form of a promissory note which, as amended, bore interest at LIBOR plus 1% and provided for quarterly principal repayments of $250,000, with the balance due at maturity in September 2014. The promissory note was prepayable, in whole or in part, at any time at CompX's option without penalty. In July 2013, CompX prepaid the remaining outstanding principal amount of the note, plus accrued interest, without penalty. The average interest rate on the promissory note payable for the year-to-date period ended July 18, 2013 (the pay-off date) was 1.3%.

WCS—Financing capital lease—In December 2010, WCS closed under a Sale and Purchase Agreement with the County of Andrews, whereby WCS sold certain real and personal property constituting a substantial portion of its property and equipment ("Transferred Assets") to the County for gross proceeds of $75 million. WCS used the net proceeds received under the Agreement to finance the construction of its Federal and Texas Compact LLRW disposal facilities. As a condition under the Agreement, in December 2010 WCS also concurrently entered into a Lease Agreement ("Lease") with the County pursuant to which WCS agreed to lease the Transferred Assets back from the County for a period of 25 years. The Lease requires monthly rental payments payable from December 2010 through August 2035, and during the Lease term WCS is responsible for all costs associated with the use, occupancy, possession and operation of the Transferred Assets. Under the terms of the Agreement, WCS was also required to pay all of the County's costs associated with the transactions, and the proceeds WCS received from the County upon closing under the Sale and Purchase Agreement were net of the County's cost, which aggregated approximately $2.6 million At the end of the Lease term, title to the Transferred Assets automatically reverts back to WCS without further payment obligation. Prior to the end of the Lease term, WCS may, at its option, terminate the Lease early upon payment of specified amounts to the County, at which time the Transferred Assets would also revert back to WCS. For financial reporting purposes, we have accounted for these transactions in tandem as a financing capital lease, in which we continue to recognize the Transferred Assets on our Consolidated Balance Sheet and our rental payments due under the Lease are accounted for as debt. The capital lease has an effective interest rate of approximately 7.0%. At the inception of the

Lease, WCS was required to prepay to the County an amount ($6.2 million) equal to its aggregate lease rentals due to the County in the final year of the Lease, the County will hold the funds as a prepaid deposit. The deposit serves as collateral for WCS' performance under the Lease and is included in our other noncurrent assets. See Notes 7 and 16.

6% promissory notes —As part of the termination of a contract with a former customer regarding various contractual and legal claims, in April 2010 WCS issued the former customer a $12.0 million long-term promissory note. The note is unsecured, bears interest at a fixed rate of 6% and is payable in five equal annual installments of principal plus accrued interest that began on December 31, 2010. WCS has the right to prepay the note at any time without penalty. A substantial portion of the principal amount of the promissory note issued was offset against deferred revenue that was unearned by WCS. The remaining $1.1 million we recognized in contract termination expense related to this agreement in the first quarter of 2010. At December 31, 2013, the outstanding principal balance of this promissory note was $2.4 million, which is payable in December 2014.

In December 2010, WCS issued a vendor, in final settlement of certain accrued construction retainage owed to such vendor, a $6.6 million non-interest bearing promissory note due on December 31, 2013. WCS made payments of $1.7 million in 2011, $2.4 million in 2012 and $2.5 million in 2013, respectively. The note calls for a final payment of $2.5 million on December 31, 2013. While the note is non-interest bearing, it does provide for a 6% discount rate in the event we elect, at our option, to prepay the promissory note. For financial reporting purposes, we discounted the note to its present value of $5.82 million at issuance based on this 6% discount rate. The amount of accrued construction retainage payable we had previously recognized was approximately $1.4 million greater than such $5.82 million amount, and as part of the settlement we reduced the value of our property and equipment by such excess to reflect the final cost. At December 31, 2013, our obligation to the vendor under this promissory note has been fully paid.

Other. Tremont's promissory note payable is discussed in Notes 3 and 16.

In January 2013, BMI entered into an $11.9 million bank note payable with Meadows Bank. The proceeds of the note were used to refinance previously outstanding debt obligations. The note requires monthly installments of $.1 million through the maturity date in January 2025. The note bears interest at a variable rate equal to the prime rate with a floor of 3.25% and a ceiling of 9.0%. The note is secured by certain real property and water rights. In addition we are required to maintain cash collateral of $750,000 with the lender, which collateral is classified as noncurrent restricted cash in our December 31, 2013 Consolidated Balance Sheet. At December 31, 2013 the note had an outstanding balance of $11.2 million. The interest rate at December 31, 2013 was 3.25%.

In May 2012, Landwell entered into a $3.9 million promissory note payable with the City of Henderson, Nevada. The note requires semi-annual principal payments of $250,000 payable solely from cash received from certain specified revenue sources with any remaining unpaid balance due in October 2020. The loan bears interest at a 3% fixed rate. Due to the uncertainty in timing of the cash to be received from the specified revenue sources, the outstanding balance of $3.1 million is deemed to be maturing in 2020.

Aggregate maturities of long-term debt at December 31, 2013

Aggregate maturities of debt at December 31, 2013 are presented in the table below. Such maturities, as they relate to Kronos note payable to Contran, are based upon the required quarterly principal repayments of its new term loan.

Years ending December 31,	Amount (In millions)
Gross amounts due each year:	
2014	$ 15.2
2015	219.2
2016	13.1

2017	22.4
2018	11.3
2019 and thereafter	535.6
Subtotal	816.8
Less amounts representing interest on capital leases	64.3
Total long-term debt	$ 752.5

After considering the effect of the new term loan Kronos obtained in February 2014 and the application of the net proceeds as discussed above, our aggregate maturities of long-term debt would be:

Years ending December 31,	Amount (In millions)
Gross amounts due each year:	
2014	$ 15.2
2015	219.2
2016	13.1
2017	22.4
2018	11.3
2019 and thereafter	715.6
Subtotal	996.8
Less amounts representing interest on capital leases	64.3
Total long-term debt	$ 932.5

Note 10—Accounts payable and accrued liabilities:

	December 31,	
	2012	2013
	(In millions)	
Accounts payable:		
Kronos	$161.3	$124.0
CompX	2.8	1.5
WCS	.9	.4
Other	4.6	7.3
Total	$169.6	$133.2
Current accrued liabilities:		
Employee benefits	$38.5	$36.1
Deferred income	5.4	36.9
Accrued litigation settlement	—	35.0
Accrued sales discounts and rebates	14.9	16.7
Environmental costs	7.6	9.1
Reserve for uncertain tax positions	3.0	3.1
Other	42.8	51.3
Total	$112.2	$188.2
Noncurrent accrued liabilities:		
Reserve for uncertain tax positions	$29.4	$49.8
Asset retirement obligations	23.8	25.6
Employee benefits	11.3	12.2
Insurance claims and expenses	9.7	9.5
Deferred payment obligation	—	8.2

Deferred income	1.0	1.3
Other	3.1	3.6
Total	$78.3	$110.2

The risks associated with certain of our accrued insurance claims and expenses have been reinsured, and the related IBNR receivables are recognized as noncurrent assets to the extent the related liability is classified as a noncurrent liability. See Note 7. Our reserve for uncertain tax positions is discussed in Note 12.

Other asset retirement obligations include amounts related to the closure and post-closure obligations associated with our Waste Management Segment's facility in West Texas. Our Compact and Federal LLRW disposal facilities were fully certified for operations in 2012, at which time we increased our estimated asset retirement obligation by approximately $19.1 million. We recognized accretion expense of $.7 million in 2012 and $1.7 million in 2013 on the closure and post-closure obligations. We are required to provide certain financial

assurance to the Texas government agencies with respect to the decommissioning obligations related to such facility, as more fully described in Note 17. Certain of our affiliates have provided or assisted us in providing such financial assurance, as discussed in Note 16.

Estimates of the ultimate cost to be incurred to settle our closure and post closure obligation require a number of assumptions, are inherently difficult to develop and the ultimate outcome may differ materially from current estimates. However, we believe our experience in the environmental services business provides a reasonable basis for estimating such costs. As additional information becomes available, cost estimates will be adjusted as necessary. It is possible that technological, regulatory or enforcement developments, the results of studies or other factors could necessitate the recording of additional liabilities which could be material.

The accrued litigation settlement relates to Kronos and is discussed in Note 17.

The deferred payment obligation relates to Tremont and is discussed in Notes 3 and 16.

Note 11—Employee benefit plans:

Defined contribution plans. Certain of our subsidiaries maintain various defined contribution pension plans for our employees worldwide. Defined contribution plan expense attributable to continuing operations approximated $3.4 million in 2011, $3.9 million in 2012 and $4.2 million in 2013.

Defined benefit plans. Kronos and NL sponsor various defined benefit pension plans worldwide. The benefits under our defined benefit plans are based upon years of service and employee compensation. Our funding policy is to contribute annually the minimum amount required under ERISA (or equivalent foreign) regulations plus additional amounts as we deem appropriate.

We expect to contribute the equivalent of $27.4 million to all of our defined benefit pension plans during 2014. Benefit payments to plan participants out of plan assets are expected to be the equivalent of:

2014	$29.2 million
2015	29.2 million
2016	29.0 million
2017	29.8 million
2018	30.4 million
Next 5 years	168.3 million

The funded status of our U.S. defined benefit pension plans is presented in the table below.

	Years ended December 31,	
	2012	2013
	(In millions)	
Change in projected benefit obligations ("PBO"):		
Balance at beginning of the year	$ 65.3	$ 69.1
Interest cost	2.7	2.4
Actuarial loss (gain)	4.9	(5.6)
Benefits paid	(3.8)	(3.9)
Balance at end of the year	$ 69.1	$ 62.0
Change in plan assets:		
Fair value at beginning of the year	$ 45.4	$ 50.7
Actual return on plan assets	6.9	7.0
Employer contributions	2.2	1.1
Benefits paid	(3.8)	(3.9)
Fair value at end of year	$ 50.7	$ 54.9
Funded status	$ (18.4)	$ (7.1)
Amounts recognized in the Consolidated Balance Sheets:		
Accrued pension costs:		
Current	$ (.3)	$ (.3)
Noncurrent	(18.1)	(6.8)
Total	(18.4)	(7.1)
Accumulated other comprehensive loss—Actuarial loss	38.1	28.9
Total	$ 19.7	$ 21.8
Accumulated benefit obligations ("ABO")	$ 69.1	$ 62.0

The components of our net periodic defined benefit pension benefit cost (credit) for U.S. plans are presented in the table below. The amounts shown below for the amortization of unrecognized actuarial losses for 2011, 2012 and 2013 were recognized as components of our accumulated other comprehensive income (loss) at December 31, 2010, 2011 and 2012, respectively, net of deferred income taxes and noncontrolling interest.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net periodic pension benefit cost (credit) for U.S. plans:			
Interest cost	$2.9	$2.7	$2.4
Expected return on plan assets	(4.8)	(4.5)	(4.9)
Amortization of unrecognized net actuarial loss	1.0	1.6	1.6
Total	$(.9)	$(.2)	$(.9)

Certain information concerning our U.S. defined benefit pension plans is presented in the table below.

December 31,

	2012	2013
	(In millions)	
Plans for which the ABO exceeds plan assets:		
Projected benefit obligations	$69.1	$62.0
Accumulated benefit obligations	69.1	62.0
Fair value of plan assets	50.7	54.9

The discount rate assumptions used in determining the actuarial present value of the benefit obligation for our U.S. defined benefit pension plans as of December 31, 2012 and 2013 are 3.6% and 4.5%, respectively. The impact of assumed increases in future compensation levels does not have an effect on the benefit obligation as the plans are frozen with regards to compensation.

The weighted-average rate assumptions used in determining the net periodic pension cost for our U.S. defined benefit pension plans for 2011, 2012 and 2013 are presented in the table below. The impact of assumed increases in future compensation levels does not have an effect on the periodic pension cost as the plans are frozen with regards to compensation.

	Years ended December 31,		
Rate	2011	2012	2013
Discount rate	5.1%	4.2%	3.6%
Long-term return on plan assets	10.0%	10.0%	10.0%

Variances from actuarially assumed rates will result in increases or decreases in accumulated pension obligations, pension expense and funding requirements in future periods.

The funded status of our foreign defined benefit pension plans is presented in the table below.

	Years ended December 31,	
	2012	2013
	(In millions)	
Change in PBO:		
Balance at beginning of the year	$ 469.7	$ 591.5
Service cost	10.4	13.1
Interest cost	22.8	21.6
Participants' contributions	1.8	1.9
Actuarial loss (gain)	95.9	(2.5)
Change in currency exchange rates	15.3	4.6
Benefits paid	(24.4)	(25.3)
Balance at end of the year	$ 591.5	$ 604.9
Change in plan assets:		
Fair value at beginning of the year	$ 343.7	$ 409.9
Actual return on plan assets	49.0	28.5
Employer contributions	28.2	27.3
Participants' contributions	1.8	1.9
Change in currency exchange rates	11.6	(.7)
Benefits paid	(24.4)	(25.3)
Fair value at end of year	$ 409.9	$ 441.6
Funded status	$ (181.6)	$ (163.3)
Amounts recognized in the Consolidated Balance Sheets:		
Pension asset	$ 5.1	$ .6
Accrued pension costs:		
Current	(1.9)	(1.4)
Noncurrent	(184.8)	(162.5)
Total	(181.6)	(163.3)

Accumulated other comprehensive loss:		
Actuarial loss	190.8	160.8
Prior service cost	5.4	2.8
Net transition obligations	1.3	—
Total	197.5	163.6
Total	$ 15.9	$ .3
ABO	$ 545.9	$ 560.0

The components of our net periodic defined benefit pension benefit cost for our foreign plans are presented in the table below. The amounts shown below for the amortization of unrecognized prior service cost, net transition obligations and actuarial losses for 2011, 2012 and 2013 were recognized as components of our accumulated other comprehensive income (loss) at December 31, 2010, 2011 and 2012, respectively, net of deferred income taxes and noncontrolling interest. During 2011, certain eligible participants elected to take lump sum distributions upon their retirement, resulting in a nominal settlement charge in 2011. In December 2013, we

amended one of our Canadian plans in which participation with respect to hourly workers was closed to new participants in December 2013, resulting in a $7.1 million curtailment charge for recognition of previously unamortized prior service cost and transition obligation and $.2 million for special termination benefits.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net periodic pension cost for foreign plans:			
Service cost	$11.2	$10.4	$13.1
Interest cost	24.1	22.8	21.6
Settlement loss	.5	—	—
Curtailment loss	—	—	7.3
Expected return on plan assets	(18.0)	(17.4)	(18.9)
Amortization of unrecognized:			
Prior service cost	1.2	1.1	1.1
Net transition obligations	.5	.4	.4
Net actuarial loss	6.8	8.0	12.5
Total	$26.3	$25.3	$37.1

Certain information concerning our foreign defined benefit pension plans is presented in the table below.

	December 31,	
	2012	2013
	(In millions)	
Plans for which the ABO exceeds plan assets:		
Projected benefit obligations	$529.4	$527.0
Accumulated benefit obligations	491.5	489.5
Fair value of plan assets	342.7	364.2

A summary of our key actuarial assumptions used to determine foreign benefit obligations as of December 31, 2012 and 2013 was:

	December 31,	
Rate	2012	2013
Discount rate	3.7%	3.8%
Increase in future compensation levels	3.1%	2.7%

A summary of our key actuarial assumptions used to determine foreign net periodic benefit cost for 2011, 2012 and 2013 are as follows:

	Years ended December 31,		
Rate	2011	2012	2013
Discount rate	5.1%	4.9%	3.7%
Increase in future compensation levels	3.0%	3.1%	3.1%
Long-term return on plan assets	5.5%	5.2%	5.0%

Variances from actuarially assumed rates will result in increases or decreases in accumulated pension obligations, pension expense and funding requirements in future periods.

The amounts shown for all of our defined benefit plans for unrecognized actuarial losses, prior service cost and net transition obligations at December 31, 2012 and 2013 have not been recognized as components of our periodic defined benefit pension cost as of those dates. These amounts will be recognized as components of our periodic defined benefit cost in future years. These amounts, net of deferred income taxes and noncontrolling interest, are recognized in our accumulated other comprehensive income (loss) at December 31, 2012 and 2013. We expect approximately $11.4 million, $.5 million and $.1 million of the unrecognized actuarial losses, prior service cost and net transition obligations, respectively, will be recognized as components of our periodic defined benefit

pension cost in 2014. The table below details the changes in other comprehensive income (loss) during 2011, 2012 and 2013.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Changes in plan assets and benefit obligations recognized in other comprehensive income (loss):			
Net actuarial gain (loss)	$(30.1)	$(66.7)	$19.8
Plan curtailment	—	—	7.1
Amortization of unrecognized:			
Prior service cost	1.2	1.1	1.1
Net transition obligations	.5	.4	.4
Net actuarial gain	8.2	9.7	14.2
Total	$(20.2)	$(55.5)	$42.6

At December 31, 2012 and 2013, substantially all of the assets attributable to our U.S. plan were invested in the Combined Master Retirement Trust (CMRT), a collective investment trust sponsored by Contran to permit the collective investment by certain master trusts that fund certain employee benefits plans sponsored by Contran and certain of its affiliates. The CMRT's long-term investment objective is to provide a rate of return exceeding a composite of broad market equity and fixed income indices (including the S&P 500 and certain Russell indices) while utilizing both third-party investment managers as well as investments directed by Mr. Simmons (prior to his death in December 2013). Prior to his death, Mr. Simmons was the sole trustee of the CMRT, and he along with the CMRT's investment committee, of which Mr. Simmons was a member, actively managed the investments of the CMRT.

The CMRT trustee and investment committee do not maintain a specific target asset allocation in order to achieve their objectives, but instead they periodically change the asset mix of the CMRT based upon, among other things, advice they receive from third-party advisors and their expectations regarding potential returns for various investment alternatives and what asset mix will generate the greatest overall return. Prior to December 2012, the CMRT had an investment in TIMET common stock; however, in December 2012 the CMRT elected to sell its shares of common stock in conjunction with the tender offer discussed in Note 15. During the history of the CMRT from its inception in 1988 through December 31, 2013, the average annual rate of return has been 14%. For the years ended December 31, 2011, 2012 and 2013, the assumed long-term rate of return for plan assets invested in the CMRT was 10%. In determining the appropriateness of the long-term rate of return assumption, we primarily relied on the historical rates of return achieved by the CMRT, although we considered other factors as well including, among other things, the investment objectives of the CMRT's managers and their expectation that such historical returns would in the future continue to be achieved over the long-term.

Following the death of Mr. Simmons in December 2013, the Contran board of directors in January 2014 appointed a financial institution as the new directed trustee of the CMRT, and the Contran board appointed five individuals (all executive officers of Contran) as the new investment committee of the CMRT. The new investment committee intends to reallocate to current and/or new investment managers or various mutual funds the portion of the CMRT assets that had previously been under the direct and active management by Mr. Simmons. Such reallocation will be done prudently over a period of time, given the asset composition of this portion of the portfolio. Concurrent with this change in investment strategy in which there is no longer a portion of the CMRT's assets under the direct and active management by Mr. Simmons, and considering the long-term asset mix for the assets of the CMRT and the expected long-term rates of return for such asset components as well as advice from Contran's actuaries, beginning in 2014 the

assumed long-term rate of return for plan assets invested in the CMRT will be reduced to 7.5%.

The CMRT unit value is determined semi-monthly, and the plans have the ability to redeem all or any portion of their investment in the CMRT at any time based on the most recent semi-monthly valuation. However, the plans do not have the right to individual assets held by the CMRT and the CMRT has the sole discretion in determining how to meet any redemption request. For purposes of our plan asset disclosure, we consider the investment in the CMRT as a Level 2 input because (i) the CMRT value is established semi-monthly and the plans have the right to redeem their investment in the CMRT, in part or in whole, at anytime based on the most recent

value and (ii) observable inputs from Level 1 or Level 2 were used to value approximately 83% of the assets of the CMRT at each of December 31, 2012 and 2013, as noted below. The aggregate fair value of all of the CMRT assets, including funds of Contran and its other affiliates that also invest in the CMRT, and supplemental asset mix details of the CMRT are as follows:

	December 31,			
	2012		2013	
	(In millions)			
CMRT asset value	$726.4		$722.8	
CMRT fair value input:				
Level 1	82	%	79	%
Level 2	1		4	
Level 3	17		17	
	100	%	100	%
CMRT asset mix:				
Domestic equities, principally publicly traded	43	%	53	%
International equities, publicly traded	2		—	
Fixed income securities, publicly traded	12		35	
Privately managed limited partnerships	8		11	
Other, primarily cash	35		1	
	100	%	100	%

The relatively large percentage portion of the CMRT invested in cash and other assets at December 31, 2012 is the result of the CMRT's December 2012 disposition of its shares of TIMET common stock, which generated aggregate proceeds to the CMRT of $254.7 million (or approximately 35% of the CMRT's total asset value at December 31, 2012), and which funds were invested in a cash equivalent at the end of 2012. Subsequently in January 2013, the CMRT redeployed such proceeds into other investments.

In determining the expected long-term rate of return on non-U.S. plan asset assumptions, we consider the long-term asset mix (e.g. equity vs. fixed income) for the assets for each of our plans and the expected long-term rates of return for such asset components. In addition, we receive third-party advice about appropriate long-term rates of return. Such assumed asset mixes are summarized below:

- In Germany, the composition of our plan assets is established to satisfy the requirements of the German insurance commissioner. Our German pension plan assets represent an investment in a large collective investment fund established and maintained by Bayer AG in which several pension plans, including our German pension plan and Bayer's pension plans, have invested. Our plan assets represent a very nominal portion of the total collective investment fund maintained by Bayer. These plan assets are a Level 3 input because there is not an active market that approximates the value of our investment in the Bayer investment fund. We determine the fair value of the Bayer plan assets based on periodic reports we receive from the managers of the Bayer plan. These periodic reports are subject to audit by the German pension regulator.
- In Canada, we currently have a plan asset target allocation of 45% to equity securities, 48% to fixed income securities, 7% to other investments and cash. We expect the long-term rate of return for such investments to average approximately 125 basis points above the applicable equity or fixed income index. The Canadian assets are Level 1 input because they are traded in active markets.
- In Norway, we currently have a plan asset target allocation of 12% to equity securities, 78% to fixed income securities, 9% to real estate and the remainder primarily to other investments and liquid investments such as money markets. The expected long-term rate of return for such investments is approximately 8%, 4%, 6% and 4%,

respectively. The majority of Norwegian plan assets are Level 1 inputs because they are traded in active markets; however approximately 8% of our Norwegian plan assets are invested in real estate and other investments not actively traded and are therefore a Level 3 input.

- We also have plan assets in Belgium and the United Kingdom. The Belgian plan assets are invested in certain individualized fixed income insurance contracts for the benefit of each plan participant as

required by the local regulators and are therefore a Level 3 input. The United Kingdom plan assets consist of marketable securities which are Level 1 inputs because they trade in active markets.
We regularly review our actual asset allocation for each plan, and will periodically rebalance the investments in each plan to more accurately reflect the targeted allocation and/or maximize the overall long-term return when considered appropriate.

The composition of our December 31, 2012 and 2013 pension plan assets by fair value level is shown in the table below. The amounts shown for plan assets invested in the CMRT include a nominal amount of cash held by our U.S. pension plan which is not part of the plan's investment in the CMRT.

	Fair Value Measurements at December 31, 2012			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Germany	$224.8	$ —	$ —	$ 224.8
Canada:				
Local currency equities	22.4	22.4	—	—
Foreign currency equities	30.3	30.3	—	—
Local currency fixed income	38.0	38.0	—	—
Global mutual fund	5.6	5.6	—	—
Cash and other	2.1	2.1	—	—
Norway:				
Local currency equities	3.2	3.2	—	—
Foreign currency equities	5.2	5.2	—	—
Local currency fixed income	40.9	40.9	—	—
Foreign currency fixed income	4.8	4.8	—	—
Real estate	5.5	—	—	5.5
Cash and other	7.6	7.0	—	.6
U.S.—CMRT	50.7	—	50.7	—
Other	19.5	12.3	—	7.2
Total	$460.6	$ 171.8	$ 50.7	$ 238.1

	Fair Value Measurements at December 31, 2013			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Germany	$247.5	$ —	$ —	$ 247.5
Canada:				
Local currency equities	24.0	24.0	—	—
Foreign currency equities	33.0	33.0	—	—
Local currency fixed income	44.7	44.7	—	—
Global mutual fund	6.1	6.1	—	—
Cash and other	.5	.5	—	—
Norway:				
Local currency equities	2.0	2.0	—	—
Foreign currency equities	5.2	5.2	—	—
Local currency fixed income	35.0	35.0	—	—
Foreign currency fixed income	3.6	3.6	—	—
Real estate	4.8	—	—	4.8
Cash and other	13.2	12.4	—	.8
U.S.—CMRT	55.0	—	55.0	—
Other	22.0	13.6	—	8.4
Total	$496.6	$ 180.1	$ 55.0	$ 261.5

A rollforward of the change in fair value of Level 3 assets follows.

	Years ended December 31,	
	2012	2013
	(In millions)	
Fair value at beginning of year	$ 200.6	$ 238.1
Gain on assets held at end of year	33.0	11.2
Gain on assets sold during the year	.1	—
Assets purchased	15.1	16.1
Assets sold	(14.3)	(14.6)
Transfers out	(1.0)	—
Currency exchange rate fluctuations	4.6	10.7
Fair value at end of year	$ 238.1	$ 261.5

Postretirement benefits other than pensions (OPEB). NL, Kronos and Tremont provide certain health care and life insurance benefits for their eligible retired employees. We have no OPEB plan assets, rather, we fund benefit payments as they are paid. At December 31, 2013, we expect to contribute the equivalent of approximately $1.5 million to all of our OPEB plans during 2014. Benefit payments to OPEB plan participants are expected to be the equivalent of:

2014	$1.5 million
2015	1.4 million
2016	1.3 million
2017	1.2 million
2018	1.1 million
Next 5 years	4.9 million

The funded status of our OPEB plans is presented in the table below.

	Years ended December 31,	
	2012	2013
	(In millions)	
Actuarial present value of accumulated OPEB obligations:		
Balance at beginning of the year	$ 22.1	$ 22.7
Service cost	.3	.3
Interest cost	.8	.7
Actuarial loss (gain)	.4	(2.2)
Plan amendment	—	(4.4)
Curtailment	—	(.1)
Change in currency exchange rates	.3	(.8)
Benefits paid from employer contributions	(1.2)	(1.1)
Balance at end of the year	$ 22.7	$ 15.1
Fair value of plan assets	—	—
Funded status	$ (22.7)	$ (15.1)
Accrued OPEB costs recognized in the Consolidated Balance Sheets:		
Current	$ (1.5)	$ (1.4)
Noncurrent	(21.2)	(13.7)
Total	(22.7)	(15.1)
Accumulated other comprehensive income (loss):		
Net actuarial loss	3.8	1.6
Prior service credit	(10.5)	(12.6)
Total	(6.7)	(11.0)
Total	$ (29.4)	$ (26.1)

The amounts shown in the table above for unrecognized actuarial losses and prior service credit at December 31, 2012 and 2013 have not been recognized as components of our periodic OPEB cost as of those dates. These amounts will be recognized as components of our periodic OPEB cost in future years. These amounts, net of deferred income taxes and noncontrolling interest, are now recognized in our accumulated other comprehensive income (loss) at December 31, 2012 and 2013. We expect to recognize approximately $2.1 million of prior service credit as a component of our periodic OPEB cost in 2014. The table below details the changes in other comprehensive income (loss) during 2011, 2012 and 2013. In the fourth quarter of 2013, we amended the benefit formula for most Canadian participants of our plans effective January 1, 2014, resulting in a curtailment gain as of December 31, 2013. Key assumptions including the service cost and benefit duration at December 31, 2013 now reflect these plan revisions to the benefit formula.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Changes in benefit obligations recognized in other comprehensive income (loss):			
Net actuarial gain (loss) arising during the year	$ (.9)	$ (.4)	$ 2.2
Plan amendments/curtailment	—	—	4.5
Amortization of unrecognized prior service credit	(2.3)	(1.8)	(2.4)

Total	$ (3.2)	$ (2.2)	$ 4.3

The components of our periodic OPEB cost are presented in the table below. The amounts shown below for the amortization of unrecognized actuarial loss and prior service credit for 2011, 2012 and 2013 were recognized as components of our accumulated other comprehensive income (loss) at December 31, 2011, 2012 and 2013, respectively, net of deferred income taxes and noncontrolling interest.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net periodic OPEB cost (credit):			
Service cost	$ .2	$ .3	$ .3
Interest cost	1.0	.8	.7
Curtailment gain	—	—	(.6)
Amortization of unrecognized prior service credit	(2.3)	(1.8)	(1.8)
Total	$ (1.1)	$ (.7)	$ (1.4)

A summary of our key actuarial assumptions used to determine the net benefit obligations as of December 31, 2012 and 2013 follows:

	December 31,	
	2012	2013
Healthcare inflation:		
Initial rate	7.0%	7.0%
Ultimate rate	5.0%	5.0%
Year of ultimate rate achievement	2018	2020
Discount rate	3.47%	4.0%

Assumed health care cost trend rates affect the amounts we report for health care plans. A one percent change in assumed health care trend rates would not have a material effect on the net periodic OPEB cost for 2013 or on the accumulated OPEB obligations at December 31, 2013.

The weighted average discount rate used in determining the net periodic OPEB cost for 2013 was 3.47% (the rate was 3.93% in 2012 and 4.65% in 2011). The weighted average rate was determined using the projected benefit obligations as of the beginning of each year.

Variances from actuarially-assumed rates will result in additional increases or decreases in accumulated OPEB obligations, net periodic OPEB cost and funding requirements in future periods.

Note 12—Income taxes:

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Pre-tax income (loss) from continuing operations:			
United States	$51.6	$89.0	$(70.4)
Non-U.S. subsidiaries	409.2	212.4	(147.5)
Total	$460.8	$301.4	$(217.9)
Expected tax expense (benefit) at U.S. federal statutory income tax rate of 35%	$161.3	$105.4	$(76.3)
Non-U.S. tax rates	(17.1)	(11.9)	4.3
Incremental U.S. tax on earnings of non-U.S. and non-tax group companies	28.8	1.0	(18.5)
U.S. state income taxes, net	4.0	1.3	(3.4)
Adjustment to the reserve for uncertain tax positions, net	(8.5)	4.2	2.1
Nondeductible expenses	3.7	4.3	2.9
Tax rate changes	(.1)	1.9	(.2)
French dividend surtax	—	.3	—
Other, net	(2.2)	(1.7)	(1.9)
Provision for income taxes (benefit)	$169.9	$104.8	$(91.0)

Components of income tax expense (benefit):			
Currently payable (refundable):			
U.S. federal and state	$8.0	$.9	$9.1
Non-U.S.	78.7	42.6	(1.2)
Total	86.7	43.5	7.9
Deferred income taxes (benefit):			
U.S. federal and state	28.6	34.5	(57.9)
Non-U.S.	54.6	26.8	(41.0)
Total	83.2	61.3	(98.9)
Provision for income taxes (benefit)	$169.9	$104.8	$(91.0)

Comprehensive provision for income taxes (benefit) allocable to:			
Income (loss) from continuing operations	$169.9	$104.8	$(91.0)
Income from discontinued operations	5.0	5.4	—
Other comprehensive income (loss):			
Marketable securities	7.7	(11.6)	5.1
Currency translation	—	4.9	5.5
Pension plans	(6.5)	(18.3)	14.1
OPEB plans	(1.0)	(.7)	1.0
Total	$175.1	$84.5	$(65.3)

The components of the net deferred tax liability at December 31, 2012 and 2013 are summarized below.

	December 31,			
	2012		2013	
	Assets	Liabilities	Assets	Liabilities
	(In millions)			
Tax effect of temporary differences related to:				
Inventories	$3.6	$ (10.3)	$4.4	$ (2.6)
Marketable securities	—	(164.8)	—	(145.8)
Property and equipment	—	(104.5)	—	(115.8)
Accrued OPEB costs	6.9	—	4.6	—
Accrued pension costs	33.3	—	21.8	—
Accrued environmental liabilities	16.9	—	40.1	—
Other deductible differences	26.2	—	58.8	—
Other taxable differences	—	(30.3)	—	(35.1)
Investments in subsidiaries and affiliates	—	(258.3)	—	(280.6)
Tax on unremitted earnings of non-U.S. subsidiaries	—	(7.6)	—	(2.6)
Tax loss and tax credit carryforwards	153.0	—	191.8	—
Valuation allowance	(.2)	—	(.1)	—
Adjusted gross deferred tax assets (liabilities)	239.7	(575.8)	321.4	(582.5)
Netting of items by tax jurisdiction	(109.8)	109.8	(149.2)	149.2
	129.9	(466.0)	172.2	(433.3)
Less net current deferred tax asset (liability)	9.6	(11.2)	23.0	(2.2)
Net noncurrent deferred tax asset (liability)	$120.3	$ (454.8)	$149.2	$ (431.1)

In the third quarter of 2012, France enacted certain changes in their income tax laws, including a 3% nondeductible surtax on all dividend distributions on which tax is assessed at the time of the distribution against the company making such distribution. Consequently, our Chemicals Segment's French subsidiary will be required to pay an additional 3% tax on all future dividend distributions. Our undistributed earnings in France are deemed to be permanently reinvested and such tax will be recognized as part of our income tax expense if and when a dividend is declared and at that time a related tax will be remitted to the French government in accordance with the applicable tax law. During 2012, our French subsidiary distributed an $8.9 million dividend. There have been no dividend distributions from our Chemicals Segment's French subsidiary during 2013. At December 31, 2013, our French subsidiary has undistributed earnings of approximately $11.0 million that, if distributed, would be subject to the 3% surtax.

Our income tax provision in 2012 includes a net incremental tax benefit of $3.1 million attributable to our Chemicals Segment. We determined during the third quarter that due to global changes in the business we would not remit certain dividends from our Chemicals Segment's non-U.S. jurisdictions. As a result, certain current year tax attributes were available for carryback to offset prior year tax expense and our provision for income taxes in the third quarter included an incremental tax benefit of $11.1 million. During the fourth quarter as a result of a change in circumstances related to our sale and the sale by certain of our affiliates of their shares of TIMET common stock, which sale provided an opportunity for us and other members of our consolidated U.S. federal income tax group to elect to claim foreign tax credits, we determined that we could tax-efficiently remit non-cash dividends from our Chemical Segment's non-U.S. jurisdictions before the end of the year that absent the TIMET sale would not have been considered. Our provision for income taxes in the fourth quarter of 2012 includes an incremental tax related to the non-cash dividend distributions of $8.0 million.

Our provision for income taxes in 2011 includes $17.2 million for U.S. incremental income taxes on current earnings repatriated from our Chemicals Segment's German subsidiary, which earnings were used to fund a portion of the repurchases of its Senior Secured Notes discussed in Note 9. In addition, we accrue U.S. incremental income taxes on the earnings of our Canadian subsidiary, which earnings we previously determined are not permanently reinvested.

Our acquisition of an additional ownership interest in BMI in December 2013, discussed in Note 3, increased our ownership interest in BMI from 32% to 63%. As a result, effective December 31, 2013 we no longer account for our ownership interest in BMI by the equity method of accounting but instead BMI is a consolidated

subsidiary. Prior to December 31, 2013, we recognized a deferred income tax liability for the excess of our book basis over our tax basis of our investment in BMI at capital gains rates, because we did not have the ability to control BMI and hence we could assume we would only realize such excess upon a disposition of our ownership interest in BMI. Upon gaining control of BMI in December 2013, we now have the ability to control the means in which such excess would be realized, and accordingly the deferred income tax liability we now recognize for such excess is based on the assumption that we would realize such excess from dividend distributions from BMI (which are taxed at a lower rate, after considering the effect of the dividends received deduction). Our income tax benefit in 2013 includes an aggregate $11.1 million benefit (classified in the table above as part of our incremental U.S. tax on earnings of non-U.S. and non-tax group companies) related to the remeasurement of such deferred income tax liability with respect to our investment in BMI from capital gains rates to dividend received deduction rates, including the deferred income taxes related to (i) the gain from the remeasurement of our existing investment in BMI to estimated fair value and (ii) the bargain purchase gain related to the additional ownership interest in BMI acquired in December 2013. See Note 3.

Tax authorities are examining certain of our U.S. and non-U.S. tax returns and have or may propose tax deficiencies, including penalties and interest. Because of the inherent uncertainties involved in settlement initiatives and court and tax proceedings, we cannot guarantee that these tax matters will be resolved in our favor, and therefore our potential exposure, if any, is also uncertain. In 2011 and 2012 our Chemicals Segment received notices of re-assessment from the Canadian federal and provincial tax authorities related to the years 2002 through 2004. We object to the re-assessments and believe the position is without merit. Accordingly, we are appealing the re-assessments and in connection with such appeal we were required to post letters of credit aggregating Cdn. $7.9 million (see Note 9). If the full amount of the proposed adjustment were ultimately to be assessed against us the cash tax liability would be approximately $15.7 million. We believe we have adequate accruals for additional taxes and related interest expense which could ultimately result from tax examinations. We believe the ultimate disposition of tax examinations should not have a material adverse effect on our consolidated financial position, results of operations or liquidity.

The following table shows the changes in the amount of our uncertain tax positions (exclusive of the effect of interest and penalties) during 2011, 2012 and 2013:

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Unrecognized tax benefits:			
Amount beginning of year	$37.4	$23.0	$33.4
Net increase:			
Tax positions taken in prior periods	.5	1.1	.5
Tax positions taken in current period	6.0	11.0	11.3
Settlements with taxing authorities—cash paid	—	(.1)	—
Lapse due to applicable statute of limitations	(20.6)	(1.8)	3.4
Acquisition of BMI and Landwell	—	—	.1
Changes in currency exchange rates	(.3)	.2	(.8)
Amount at end of year	$23.0	$33.4	$47.9

If our uncertain tax positions were recognized, a benefit of $23.5 million, $27.9 million and $29.2 million at December 31, 2011, 2012 and 2013, respectively, would affect our effective income tax rate. We currently estimate that our unrecognized tax benefits will decrease by approximately $8.2 million during the next twelve months due to the reversal of certain timing differences and the expiration of certain statutes of limitations.

We file income tax returns in various U.S. federal, state and local jurisdictions. We also file income tax returns in various foreign jurisdictions, principally in Germany, Canada, Belgium and Norway. Our U.S. income tax returns prior to 2010 are generally considered closed to examination by applicable tax authorities. Our foreign income tax returns are generally considered closed to examination for years prior to: 2004 for Norway; 2008 for Canada; 2009 for Germany; and 2010 for Belgium.

We accrue interest and penalties on our uncertain tax positions as a component of our provision for income taxes. We accrued $.6 million, $.9 million and $1.3 million of interest and penalties during 2011, 2012 and

2013, respectively, and at December 31, 2012 and 2013 we had $4.1 million and $5.0 million, respectively, accrued for interest and an immaterial amount accrued for penalties for our uncertain tax positions.

At December 31, 2013, Kronos had the equivalent of $842 million and $127 million of net operating loss carryforwards for German corporate and trade tax purposes, respectively, and it had the equivalent of $102 million of net operating loss carryforwards for Belgian corporate tax purposes. At December 31, 2013, we have concluded that no deferred income tax asset valuation allowance is required to be recognized with respect to such carryforwards, principally because (i) such carryforwards have an indefinite carryforward period, (ii) we have utilized a portion of such carryforwards in Germany during the most recent three-year period and (iii) we currently expect to utilize the remainder of such carryforwards over the long term. However, prior to the complete utilization of these carryforwards, if we generate operating losses in our German and Belgian operations for an extended period of time, it is possible we might conclude the benefit of the carryforwards would no longer meet the more-likely-than-not recognition criteria, at which point we would be required to recognize a valuation allowance against some or all of the then-remaining tax benefit associated with the carryforwards.

Note 13—Noncontrolling interest in subsidiaries:

	December 31,	
	2012	2013
	(In millions)	
Noncontrolling interest in net assets:		
Kronos Worldwide	$267.0	$241.9
NL Industries	77.8	74.5
CompX International	13.3	13.6
BMI	—	33.7
Landwell	—	27.8
Total	$358.1	$391.5

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Noncontrolling interest in net income (loss) of subsidiaries:			
Kronos Worldwide	$62.6	$42.6	$(20.3)
NL Industries	13.9	15.2	(9.4)
CompX International	1.0	4.5	.8
Total	$77.5	$62.3	$(28.9)

A portion of the noncontrolling interest in the net income (loss) of subsidiaries in 2011 and 2012 relates to discontinued operations, see Note 3. The changes in our ownership interest in our subsidiaries and the effect on our equity is as follows:

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Net income (loss) attributable to Valhi stockholders	$217.5	$159.8	$(98.0)
Transfers from noncontrolling interest:			
Issuance of subsidiary stock	.4	.2	(.4)
Net income (loss) attributable to Valhi stockholders and change from noncontrolling interest in subsidiaries	$217.9	$160.0	$(98.4)

See Note 3 for information regarding the sale of Kronos common stock in 2012.

Note 14—Valhi stockholder's equity:

	Shares of common stock		
	Issued	Treasury	Outstanding
	(In millions)		
Balance at December 31, 2010	355.2	(12.2)	341.0
Acquired during 2011	—	(1.0)	(1.0)
Balance at December 31, 2012 and 2013	355.2	(13.2)	342.0

Valhi authorized shares and stock split. In May 2012, we amended our certificate of incorporation to increase the authorized number of shares of our common stock to 500 million. Subsequently in May 2012, we implemented a 3-for-1 split of our common stock in the form of a stock dividend. Other than the disclosure of the increase in the authorized number of shares of our common stock, we have adjusted all share and per-share disclosures for all periods presented in our Consolidated Financial Statements to give effect to the stock split.

We have issued a nominal number of shares of Valhi common stock during 2011, 2012 and 2013, principally associated with stock awards issued annually to members of our board of directors.

Valhi share repurchases and cancellations. Prior to 2011, our board of directors authorized the repurchase of up to 10.0 million shares of our common stock in open market transactions, including block purchases, or in privately negotiated transactions, which may include transactions with our affiliates or subsidiaries. We may purchase the stock from time to time as market conditions permit. The stock repurchase program does not include specific price targets or timetables and may be suspended at any time. Depending on market conditions, we may terminate the program prior to completion. We will use cash on hand to acquire the shares. Repurchased shares could be retired and cancelled or may be added to our treasury stock and used for employee benefit plans, future acquisitions or other corporate purposes. We did not make any such purchases under the plan in each of 2011, 2012 and 2013.

Treasury stock. The treasury stock we reported for financial reporting purposes at December 31, 2011, 2012 and 2013 represents our proportional interest in the shares of our common stock held by NL and Kronos. NL held approximately 14.4 million shares of our common stock at December 31, 2012 and 2013. Prior to 2011, Kronos held approximately 364,000 shares of Valhi common stock. During 2011, Kronos purchased an additional 1.4 million shares in open market transactions for an aggregate purchase price of $12.6 million, and at December 31, 2011, 2012 and 2013 Kronos held an aggregate of 1.7 million shares of our common stock. Under Delaware Corporation Law, 100% (and not the proportionate interest) of a parent company's shares held by a majority-owned subsidiary of the parent is considered to be treasury stock for voting purposes. As a result, our common shares outstanding for financial reporting purposes differ from those outstanding for legal purposes.

Preferred stock. Our outstanding preferred stock consists of 5,000 shares of our Series A Preferred Stock having a liquidation preference of $133,466.75 per share, or an aggregate liquidation preference of $667.3 million. The outstanding shares of Series A Preferred Stock are held by Contran and represent all of the shares of Series A Preferred Stock we are authorized to issue. The preferred stock has a par value of $.01 per share and pays a non-cumulative cash dividend at an annual rate of 6% of the aggregate liquidation preference only when authorized and declared by our board of directors. The shares of Series A Preferred Stock are non-convertible, and the shares do not carry any redemption or call features (either at our option or the option of the holder). A holder of the Series A shares does not have any voting rights, except in limited circumstances, and is not entitled to a preferential dividend right that is senior to our shares of common stock. Upon the liquidation, dissolution or winding up of our affairs, a holder of the Series A shares is entitled to be paid a liquidation preference of $133,466.75 per share, plus an amount (if any) equal to any declared but unpaid dividends, before any distribution of assets is made to holders of our

common stock. Through December 31, 2013, we have not declared any dividends on the Series A Preferred Stock since its issuance prior to 2011.

Valhi long-term incentive compensation plan. Prior to 2013, we had an incentive stock option plan that provided for the discretionary grant of, among other things since its five-year extension, nonqualified stock options, restricted common stock, stock awards and stock appreciation rights. We had no outstanding stock options at December 31, 2011 or 2012 under this plan. In February 2012, our board of directors voted to replace the existing long-term incentive plan with a new plan that would provide for the award of stock to our board of directors, and up to a maximum of 200,000 shares could be awarded. The new plan was approved at our May 2012 shareholder

meeting, at which time the prior long-term incentive compensation plan terminated. We awarded 6,000 shares under this new plan in 2012 and 5,000 shares in 2013, and at December 31, 2013 189,000 shares are available for future award under this new plan.

Stock plans of subsidiaries. Kronos, NL and CompX each maintain plans which provide for the award of their common stock to their board of directors. At December 31, 2013, approximately 190,000 shares of common stock were available for future grant under each of such plans.

Earnings per share. Basic earnings per share of common stock is based upon the weighted average number of our common shares actually outstanding during each period. Diluted earnings per share of common stock includes the impact of our outstanding dilutive stock options as well as the dilutive effect, if any, of diluted earnings per share reported by Kronos, NL or CompX. The dilutive effect of dilutive earnings per share for Kronos, NL and CompX in 2011, 2012 and 2013 was not significant.

Accumulated other comprehensive income (loss). Accumulated other comprehensive income (loss) attributable to Valhi stockholders comprises changes in equity as presented in the table below.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Accumulated other comprehensive income (loss) (net of tax and noncontrolling interest):			
Marketable securities:			
Balance at beginning of year	$14.6	$6.4	$2.1
Other comprehensive income (loss):			
Unrealized gain (loss) arising during the year	(8.2)	4.1	—
Less reclassification adjustments for amounts included in realized loss (gain)	—	(8.4)	.7
Balance at end of year	$6.4	$2.1	$2.8
Currency translation:			
Balance at beginning of year	$59.2	$37.5	$53.3
Other comprehensive income (loss):			
Arising during the year	(21.7)	23.0	5.9
Less reclassification adjustments for amounts included in gain on disposal	—	(7.2)	—
Balance at end of year	$37.5	$53.3	$59.2
Defined benefit pension plans:			
Balance at beginning of year	$(59.8)	$(72.6)	$(101.5)
Other comprehensive income (loss):			
Amortization of prior service cost and net losses included in net periodic pension cost	4.0	6.1	8.4
Net actuarial gain (loss) arising during year	(16.8)	(35.0)	12.6
Plan curtailment	—	—	4.0
Balance at end of year	$(72.6)	$(101.5)	$(76.5)
OPEB plans:			
Balance at beginning of year	$7.2	$5.4	$4.1
Other comprehensive loss:			
Amortization of prior service credit and net losses included in net periodic OPEB cost	(.5)	(1.0)	(1.4)
Net actuarial gain (loss) arising during year	(1.3)	(.3)	1.3
Plan amendment	—	—	2.5
Balance at end of year	$5.4	$4.1	$6.5
Total accumulated other comprehensive income (loss):			
Balance at beginning of year	$21.2	$(23.3)	$(42.0)
Other comprehensive income (loss)	(44.5)	(18.7)	34.0
Balance at end of year	$(23.3)	$(42.0)	$(8.0)

The marketable securities reclassification adjustment in 2012, all of which was reclassified into income from continuing operations, consists principally of the securities transaction gain related to the sale of TIMET common stock discussed in Note 15. The foreign currency translation reclassification adjustment in 2012 relates to CompX's disposition of its furniture components operations discussed in Note 3. See Note 11 for amounts related to our defined benefit pension plans and OPEB plans.

Note 15—Other income, net:

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Securities earnings:			
Dividends and interest	$29.2	$28.4	$26.4
Securities transactions, net	(.6)	21.8	.2
Total	28.6	50.2	26.6
Equity in earnings	(.5)	(.2)	.5
Insurance recoveries	16.9	3.3	9.4
Currency transactions, net	3.0	(1.0)	(3.8)
Disposal of property and equipment, net	(.9)	1.5	(.5)
Gain on bargain purchase and remeasurement of our existing investment in acquiree	—	—	54.6
Litigation settlement gains	—	14.7	—
Other, net	1.9	2.1	1.2
Total	$49.0	$70.6	$88.0

Dividends and interest income includes distributions from The Amalgamated Sugar Company LLC of $25.4 million in each of 2011, 2012 and 2013.

At December 31, 2011, we, directly and through our ownership in NL and Kronos, held approximately 6.5 million, or 3.7%, of the outstanding common stock of TIMET, and Contran, Mr. Harold Simmons and persons and other entities related to Mr. Simmons (including us) owned a majority of TIMET's outstanding common stock. In December 2012, we sold all of our shares of TIMET common stock for $107.6 million ($16.50 per share) pursuant to a cash tender offer by a third party, and all of our affiliates also sold their shares of TIMET common stock for the same price. Securities transactions in 2012 consist of a $21.6 million pre-tax gain we recognized on the sale of these TIMET shares.

Insurance recoveries relate primarily to amounts NL received from certain of its former insurance carriers, and relate principally to the recovery of prior lead pigment and asbestos litigation defense costs incurred by us. We have agreements with four former insurance carriers pursuant to which the carriers reimburse us for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of our future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. In September 2011 we reached a settlement with one of our former insurance carriers in which they agreed to reimburse NL for a portion of its past lead pigment litigation defense costs. Substantially all of the insurance recoveries we recognized in 2011 relates to this settlement.

Disposal of property and equipment, net in 2012 includes a gain of $3.2 million on the sale of certain excess real property owned by NL.

While we continue to seek additional insurance recoveries for lead pigment and asbestos litigation matters, we do not know the extent to which we will be successful in obtaining additional reimbursement for either defense costs or indemnity. Any additional insurance recoveries would be recognized when the receipt is probable and the amount is determinable. See Note 17.

In 2005, certain real property NL owned that is subject to environmental remediation was taken from us in a condemnation proceeding by a governmental authority in New Jersey. The condemnation proceeds, the adequacy of which we disputed, were placed into escrow with a court in New Jersey. Because the funds were in escrow with the court and were beyond our control, we never gave recognition to such condemnation proceeds for financial reporting purposes. In October 2008 we reached a definitive settlement agreement with such governmental authority and a real estate developer, among others, pursuant to which, among other things, we would receive certain agreed-upon amounts in satisfaction of our claim to just compensation for the taking of our property in the condemnation proceeding at three separate closings, and we would be indemnified against certain environmental liabilities related to such property, in exchange for the release of our equitable lien on specified portions of the

property at each closing. At the initial October 2008 closing, we received cash plus a promissory note in the amount of $15.0 million in exchange for the release of our equitable lien on a portion of the property. The $15.0 million promissory note bore interest at LIBOR plus 2.75%, with interest payable monthly and all principal due no later than October 2011. In October 2011, we collected the full $15.0 million due to us under the promissory note issued in connection with the first closing. In April 2009, the second closing was completed, pursuant to which we received an aggregate of $11.8 million in cash. In May 2012, NL reached an agreement with the New Jersey governmental authority and the real estate developer pursuant to which NL received an aggregate of $15.6 million cash for the third and final closing contemplated by the October 2008 settlement agreement associated with certain real property NL formerly owned in New Jersey. Upon NL's receipt of these cash proceeds, our equitable lien on a portion of such property was released. For financial reporting purposes, we have accounted for the consideration received in each of the first, second and third closings contemplated by the October 2008 settlement agreement by the full accrual method of accounting for real estate sales (since the settlement agreement arose out of a dispute concerning the adequacy of the condemnation proceeds of our former real property in New Jersey). Under this method, we recognized a pre-tax gain of approximately $14.7 million in the second quarter of 2012, based on the excess of the $15.6 million cash received over our carrying value of the property from which our equitable lien was released. Similarly, the cash received in the third closing is reflected as an investing activity in our Consolidated Statement of Cash Flows.

Equity in earnings primarily relates to our investment in BMI and Landwell. The gain on bargain purchase and remeasurement of our existing investment in acquiree relates to our acquisition of a controlling interest in BMI and Landwell. See Note 3.

Note 16—Related party transactions:

We may be deemed to be controlled by Ms. Lisa Simmons, Ms. Connelly and Ms. Annette Simmons. See Note 1. Corporations that may be deemed to be controlled by or affiliated with such individuals sometimes engage in (a) intercorporate transactions such as guarantees, management and expense sharing arrangements, shared fee arrangements, joint ventures, partnerships, loans, options, advances of funds on open account, and sales, leases and exchanges of assets, including securities issued by both related and unrelated parties and (b) common investment and acquisition strategies, business combinations, reorganizations, recapitalizations, securities repurchases, and purchases and sales (and other acquisitions and dispositions) of subsidiaries, divisions or other business units, which transactions have involved both related and unrelated parties and have included transactions which resulted in the acquisition by one related party of a publicly-held noncontrolling interest in another related party. While no transactions of the type described above are planned or proposed with respect to us other than as set forth in these financial statements, we continuously consider, review and evaluate, and understand that Contran and related entities consider, review and evaluate such transactions. Depending upon the business, tax and other objectives then relevant, it is possible that we might be a party to one or more such transactions in the future.

From time to time, we will have loans and advances outstanding between us and various related parties, including Contran, pursuant to term and demand notes. We generally enter into these loans and advances for cash management purposes. When we loan funds to related parties, we are generally able to earn a higher rate of return on the loan than we would earn if we invested the funds in other instruments. While certain of these loans may be of a lesser credit quality than cash equivalent instruments otherwise available to us, we believe we have evaluated the credit risks involved and appropriately reflect those credit risks in the terms of the applicable loans. When we borrow from related parties, we are generally able to pay a lower rate of interest than we would pay if we borrowed from unrelated parties.

In December 2011, we entered into an unsecured revolving demand promissory note with Contran whereby, as amended, we agreed to loan Contran up to $65 million. Our loan to Contran bore interest at prime plus 3.0% payable

quarterly, with all principal due on demand, but in any event no earlier than December 31, 2014. The amount of our outstanding loans to Contran at any time was at our discretion. We had loans outstanding to Contran of $11.2 million at December 31, 2011, and loaned an additional $52.8 million to Contran in 2012. In December 2012, Contran repaid the aggregate $64.0 million of borrowings, at which time the loan facility was terminated. Interest income on our loan to Contran was $36,000 in 2011 and $.8 million in 2012.

We also engaged in related party loans, as discussed in Note 9. Interest expense related to our borrowings from Contran was $.5 million in 2011, $.1 million in 2012 and $19.0 million in 2013. Interest expense related to CompX's note payable to TFMC (a subsidiary of TIMET, and during the time period in which TIMET was one of our affiliates) was $.5 million in 2011 and $.3 million in 2012.

A subsidiary of Contran has guaranteed (i) WCS's obligation under its financing capital lease with the County of Andrews, Texas discussed in Note 9, (ii) Tremont's obligation under its $19.1 million promissory note payable discussed in Notes 3 and 9 and (iii) Tremont's $8.2 million ($11.1 million face value) deferred payment obligation discussed in Notes 3 and 10. The guaranty obligation would only arise upon our failure to make any required repayments. We currently do not expect such Contran subsidiary will be required to perform under such guarantees for the foreseeable future.

Under the terms of various intercorporate services agreements ("ISAs") we enter into with Contran, employees of Contran provide us certain management, tax planning, financial and administrative services on a fee basis. Such charges are based upon estimates of the time devoted by the Contran employees to our affairs, and the compensation and other expenses associated with those persons. Because of the large number of companies affiliated with Contran, we believe we benefit from cost savings and economies of scale gained by not having certain management, financial and administrative staffs duplicated at all of our subsidiaries, thus allowing certain Contran employees to provide services to multiple companies but only be compensated by Contran. The net ISA fees charged to us by Contran and approved by the independent members of the applicable board of directors aggregated $27.1 million in 2011, $32.0 million in 2012 and $36.1 million in 2013. These agreements are renewed annually, and we expect to pay a net amount of $33.4 million under the ISAs during 2014.

At December 31, 2013 we had an aggregate 12.0 million shares of our Kronos common stock pledged as collateral for certain debt obligations of Contran. We receive a fee from Contran for pledging these Kronos shares, determined by a formula based on the market value of the shares pledged. During 2013 we received $.8 million from Contran for this pledge.

Tall Pines Insurance Company and EWI RE, Inc. provide for or broker certain insurance or reinsurance policies for Contran and certain of its subsidiaries and affiliates, including us. Tall Pines and EWI are our subsidiaries. Consistent with insurance industry practices, Tall Pines and EWI receive commissions from the insurance and reinsurance underwriters and/or assess fees for the policies that they provide or broker to us. Tall Pines purchases reinsurance for substantially all of the risks it underwrites from third party insurance carriers with an A.M. Best Company rating of generally at least A- (Excellent). We expect these relationships with Tall Pines and EWI will continue in 2014.

Contran and certain of its subsidiaries and affiliates, including us, purchase certain of their insurance policies as a group, with the costs of the jointly-owned policies being apportioned among the participating companies. With respect to some of these policies, it is possible that unusually large losses incurred by one or more insureds during a given policy period could leave the other participating companies without adequate coverage under that policy for the balance of the policy period. As a result, we and Contran have entered into a loss sharing agreement under which any uninsured loss is shared by those entities who have submitted claims under the relevant policy. We believe the benefits in the form of reduced premiums and broader coverage associated with the group coverage for such policies justifies the risk associated with the potential of any uninsured loss.

BMI, among other things, provides utility services (primarily water distribution, maintenance of a common electrical facility and sewage disposal monitoring) to TIMET and other current manufacturers within an industrial complex located in Nevada. The other owners of BMI are generally other former or current manufacturers located within the complex. BMI provides power transmission and sewer services on a cost reimbursement basis, similar to a cooperative, while water delivery is currently provided at the same rates as are charged by BMI to an unrelated third

party. Amounts paid by TIMET to BMI for these utility services (during the time period in which TIMET was one of our affiliates) were $1.6 million in 2011 and $1.8 million in 2012.

Additionally, BMI maintains insurance coverage for common area environmental remediation activities within the industrial complex located in Henderson, Nevada with participation from numerous manufacturers within the industrial complex, including TIMET. In December 2011, after approval by TIMET's independent members of its board of directors, TIMET sold a portion of its excess insurance reserve limit under such insurance policy to BMI

for $2.8 million. As consideration for the sale, BMI paid TIMET $1.4 million in cash and issued a $1.4 million promissory note to TIMET that bore interest at 3% per annum with the balance due no later than December 2012. This amount was paid as scheduled in December 2012. The terms of the sale were comparable with then-recent negotiations for a similar transaction between BMI and other unrelated third party manufacturers within the same industrial complex, and BMI completed such transaction with the other unrelated third party in January 2012 on those comparable terms. Additionally, if at any time through December 2013 BMI had purchased excess insurance limits from any of the other manufacturers within the industrial complex at a price per dollar of coverage in excess of the price per dollar of coverage inherent in TIMET's sale to BMI, BMI would have been obligated to pay TIMET such excess price per dollar of coverage as additional consideration for its sale. No such additional purchases occurred and therefore no additional payments were made to TIMET.

WCS is required to provide certain financial assurances to the Texas government agencies with respect to certain decommissioning obligations related to our facility in West Texas. See Note 17. Such financial assurances may be provided by various means. We and certain of our affiliates have provided or assisted WCS with providing such financial assurance, as specified below:

- During 2011, 2012 and 2013, a subsidiary of Contran guaranteed certain of WCS' specified decommissioning obligations as it relates to its RCRA and TSCA licenses and permits, currently estimated at $5.5 million. Such Contran subsidiary was eligible to provide this guarantee because it met certain specified financial tests. The obligations would arise only upon a closure of our West Texas facility and our failure to perform the required decommissioning activities. We do not currently expect that such subsidiary will be required to perform under such guarantee for the foreseeable future.
- During 2011, 2012 and 2013, Contran issued a letter of credit ("LOC") under its bank credit facility to the state of Texas related to specified decommissioning obligations associated with our byproduct facility. At December 31, 2013, the amount of such LOC was $6.0 million. The LOC would only be drawn down upon the closure of our byproduct facility and our failure to perform the required decommissioning activities. We do not currently expect that the LOC will have to be drawn down for the foreseeable future. We incurred costs related to the LOC of $.1 million in each of 2011, 2012 and 2013.
- During 2011, a subsidiary of Contran pledged certain of its marketable securities as collateral for the benefit of the state of Texas related to specified decommissioning obligations associated with our LLRW disposal facilities, currently estimated at $56.0 million. In return for such pledge, we agreed to pay such Contran subsidiary a collateral pledge fee and such fee was $.1 million in 2011 and $.7 million in 2012. In November 2012, upon the release from the pledge of these marketable securities, Valhi pledged certain of our marketable securities to replace the securities previously pledged. The marketable securities would only be liquidated upon a closure of our West Texas facility and our failure to perform the required decommissioning activities. We do not currently expect that such marketable securities will be required to be liquidated for the foreseeable future. Such marketable securities would be released in November 2016 upon our payment of approximately $119.5 million into a collateral trust, as discussed in Note 17.
- During 2011, we, certain of our subsidiaries, Contran, and certain subsidiaries of Contran guaranteed WCS' obligations under the surety bond (currently valued at $32.2 million) discussed in Note 17. The obligations would arise upon our failure to make the required quarterly payments into the surety bond trust discussed in Note 17. We do not currently expect that we, certain of our subsidiaries, Contran, and such certain Contran subsidiaries will be required to perform under such guarantee for the foreseeable future.

Receivables from and payables to affiliates are summarized in the table below.

	December 31,	
	2012	2013
	(In millions)	
Current receivables from affiliates:		
Louisiana Pigment Company, L.P., net	$ —	$ 14.2
Contran—trade items	.3	.5
Total	$.3	$14.7
Current payables to affiliates:		
Louisiana Pigment Company, L.P.	$23.4	$21.1
Contran:		
Income taxes, net	2.6	4.3
Trade items	26.8	26.1
Total	$52.8	$51.5
Payable to affiliate included in long-term debt:		
Valhi—Contran credit facility	$157.6	$206.5
Kronos— note payable to Contran	—	170.0
Total	$157.6	$376.5

Amounts payable to LPC are generally for the purchase of TiO_2, while amounts receivable from LPC are generally from the sale of TiO_2 feedstock. See Note 7. Purchases of TiO_2 from LPC were $144.8 million in 2011, $250.2 million in 2012 and $224.5 million in 2013. Sales of feedstock to LPC were $93.0 million in 2011, $143.7 million in 2012 and $141.1 million in 2013. Substantially all of the Contran trade payables relates to the ISA fees charged to WCS by Contran, which ISA fees had not been paid by WCS to Contran for 2012 and prior years. See Note 9 for more information on the Valhi and Kronos credit facilities with Contran.

Note 17—Commitments and contingencies:

Lead pigment litigation—NL

NL's former operations included the manufacture of lead pigments for use in paint and lead-based paint. NL, other former manufacturers of lead pigments for use in paint and lead-based paint (together, the "former pigment manufacturers"), and the Lead Industries Association (LIA), which discontinued business operations in 2002, have been named as defendants in various legal proceedings seeking damages for personal injury, property damage and governmental expenditures allegedly caused by the use of lead-based paints. Certain of these actions have been filed by or on behalf of states, counties, cities or their public housing authorities and school districts, and certain others have been asserted as class actions. These lawsuits seek recovery under a variety of theories, including public and private nuisance, negligent product design, negligent failure to warn, strict liability, breach of warranty, conspiracy/concert of action, aiding and abetting, enterprise liability, market share or risk contribution liability, intentional tort, fraud and misrepresentation, violations of state consumer protection statutes, supplier negligence and similar claims.

The plaintiffs in these actions generally seek to impose on the defendants responsibility for lead paint abatement and health concerns associated with the use of lead-based paints, including damages for personal injury, contribution and/or indemnification for medical expenses, medical monitoring expenses and costs for educational programs. To the

extent the plaintiffs seek compensatory or punitive damages in these actions, such damages are generally unspecified. In some cases, the damages are unspecified pursuant to the requirements of applicable state law. A number of cases are inactive or have been dismissed or withdrawn. Most of the remaining cases are in various pre-trial stages. Some are on appeal following dismissal or summary judgment rulings in favor of either the defendants or the plaintiffs.

We believe that these actions are without merit, and we intend to continue to deny all allegations of wrongdoing and liability and to defend against all actions vigorously. We do not believe it is probable that we have incurred any liability with respect to all of the lead pigment litigation cases to which we are a party, and liability to us that may result, if any, in this regard cannot be reasonably estimated, because:

- NL has never settled any of the market share, risk contribution, intentional tort, fraud, nuisance, supplier negligence, breach of warranty, conspiracy, misrepresentation, aiding and abetting, enterprise liability, or statutory cases,
- no final, non-appealable adverse verdicts have ever been entered against NL, and
- NL has never ultimately been found liable with respect to any such litigation matters, including over 100 cases over a twenty-year period for which we were previously a party and for which we have been dismissed without any finding of liability.

Accordingly, we have not accrued any amounts for any of the pending lead pigment and lead-based paint litigation cases. In addition, we have determined that liability to us which may result, if any, cannot be reasonably estimated because there is no prior history of a loss of this nature on which an estimate could be made and there is no substantive information available upon which an estimate could be based.

New cases may continue to be filed against us. We cannot assure you that we will not incur liability in the future in respect of any of the pending or possible litigation in view of the inherent uncertainties involved in court and jury rulings. In the future, if new information regarding such matters becomes available to us (such as a final, non-appealable adverse verdict against us or otherwise ultimately being found liable with respect to such matters), at that time we would consider such information in evaluating any remaining cases then-pending against us as to whether it might then have become probable we have incurred liability with respect to these matters, and whether such liability, if any, could have become reasonably estimable. The resolution of any of these cases could result in the recognition of a loss contingency accrual that could have a material adverse impact on our net income for the interim or annual period during which such liability is recognized and a material adverse impact on our consolidated financial condition and liquidity.

In one of these lead pigment cases, in April 2000 we were served with a complaint in County of Santa Clara v. Atlantic Richfield Company, et al. (Superior Court of the State of California, County of Santa Clara, Case No. 1-00-CV-788657) brought by a number of California government entities against the former pigment manufacturers, the LIA and certain paint manufacturers. The County of Santa Clara sought to recover compensatory damages for funds the plaintiffs have expended or will in the future expend for medical treatment, educational expenses, abatement or other costs due to exposure to, or potential exposure to, lead paint, disgorgement of profit, and punitive damages. In July 2003, the trial judge granted defendants' motion to dismiss all remaining claims. Plaintiffs appealed and the intermediate appellate court reinstated public nuisance, negligence, strict liability, and fraud claims in March 2006. A fourth amended complaint was filed in March 2011 on behalf of The People of California by the County Attorneys of Alameda, Ventura, Solano, San Mateo, Los Angeles and Santa Clara, and the City Attorneys of San Francisco, San Diego and Oakland. That complaint alleged that the presence of lead paint created a public nuisance in each of the prosecuting attorney jurisdictions and seeks its abatement. In July and August 2013, the case was tried. In January 2014, the Judge issued a judgment finding us, The Sherwin Williams Company and ConAgra jointly and severally liable for the abatement of lead paint in pre-1980 homes, and ordered the defendants to pay an aggregate $1.15 billion to the State of California to fund such abatement. NL believes that this judgment is inconsistent with California law and is unsupported by the evidence, and we will appeal in the first quarter of 2014. In February 2014, NL filed a motion for a new trial.

The Santa Clara case is unique in that this is the second time that an adverse verdict in the lead pigment litigation has been entered against NL (the first adverse verdict against NL was ultimately overturned on appeal). We have concluded that the likelihood of a loss in this case has not reached a standard of "probable" as contemplated by ASC 450, given (i) the substantive, substantial and meritorious grounds on which the adverse verdict in the Santa Clara

case will be appealed (assuming our motion for a new trial is not granted), (ii) the uniqueness of the Santa Clara verdict (i.e. no final, non-appealable verdicts have ever been rendered against us, or any of the other former lead pigment manufacturers, based on the public nuisance theory of liability or otherwise), and (ii) the rejection of the public nuisance theory of liability as it relates to lead pigment matters in many other jurisdictions (no jurisdiction in which a plaintiff has asserted a public nuisance theory of liability has ever successfully been upheld). In addition, liability that may result, if any, cannot be reasonably estimated, as NL

continues to have no basis on which an estimate of liability could be made, as discussed above. However, as with any legal proceeding, there is no assurance that any of any appeal would be successful, and it is reasonably possible, based on the outcome of the appeals process, that NL may in the future incur some liability resulting in the recognition of a loss contingency accrual that could have a material adverse impact on our results of operations, financial position and liquidity.

Environmental matters and litigation

Our operations are governed by various environmental laws and regulations. Certain of our businesses are and have been engaged in the handling, manufacture or use of substances or compounds that may be considered toxic or hazardous within the meaning of applicable environmental laws and regulations. As with other companies engaged in similar businesses, certain of our past and current operations and products have the potential to cause environmental or other damage. We have implemented and continue to implement various policies and programs in an effort to minimize these risks. Our policy is to maintain compliance with applicable environmental laws and regulations at all of our plants and to strive to improve environmental performance. From time to time, we may be subject to environmental regulatory enforcement under U.S. and non-U.S. statutes, the resolution of which typically involves the establishment of compliance programs. It is possible that future developments, such as stricter requirements of environmental laws and enforcement policies, could adversely affect our production, handling, use, storage, transportation, sale or disposal of such substances. We believe that all of our facilities are in substantial compliance with applicable environmental laws.

Certain properties and facilities used in our former operations, including divested primary and secondary lead smelters and former mining locations, are the subject of civil litigation, administrative proceedings or investigations arising under federal and state environmental laws and common law. Additionally, in connection with past operating practices, we are currently involved as a defendant, potentially responsible party (PRP) or both, pursuant to the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act (CERCLA), and similar state laws in various governmental and private actions associated with waste disposal sites, mining locations, and facilities that we or our predecessors, our subsidiaries or their predecessors currently or previously owned, operated or used, certain of which are on the United States Environmental Protection Agency's (EPA) Superfund National Priorities List or similar state lists. These proceedings seek cleanup costs, damages for personal injury or property damage and/or damages for injury to natural resources. Certain of these proceedings involve claims for substantial amounts. Although we may be jointly and severally liable for these costs, in most cases we are only one of a number of PRPs who may also be jointly and severally liable, and among whom costs may be shared or allocated. In addition, we are also a party to a number of personal injury lawsuits filed in various jurisdictions alleging claims related to environmental conditions alleged to have resulted from our operations.

Obligations associated with environmental remediation and related matters are difficult to assess and estimate for numerous reasons including the:

- complexity and differing interpretations of governmental regulations,
- number of PRPs and their ability or willingness to fund such allocation of costs,
- financial capabilities of the PRPs and the allocation of costs among them,
- solvency of other PRPs,
- multiplicity of possible solutions,
- number of years of investigatory, remedial and monitoring activity required,
- uncertainty over the extent, if any, to which our former operations might have contributed to the conditions allegedly giving rise to such personal injury, property damage, natural resource and related claims and

- number of years between former operations and notice of claims and lack of information and documents about the former operations.

In addition, the imposition of more stringent standards or requirements under environmental laws or regulations, new developments or changes regarding site cleanup costs or the allocation of costs among PRPs,

solvency of other PRPs, the results of future testing and analysis undertaken with respect to certain sites or a determination that we are potentially responsible for the release of hazardous substances at other sites, could cause our expenditures to exceed our current estimates. We cannot assure you that actual costs will not exceed accrued amounts or the upper end of the range for sites for which estimates have been made, and we cannot assure you that costs will not be incurred for sites where no estimates presently can be made. Further, additional environmental and related matters may arise in the future. If we were to incur any future liability, this could have a material adverse effect on our consolidated financial statements, results of operations and liquidity.

We record liabilities related to environmental remediation and related matters when estimated future expenditures are probable and reasonably estimable. We adjust such accruals as further information becomes available to us or as circumstances change. Unless the amounts and timing of such estimated future expenditures are fixed and reasonably determinable, we generally do not discount estimated future expenditures to their present value due to the uncertainty of the timing of the payout. We recognize recoveries of costs from other parties, if any, as assets when their receipt is deemed probable. At December 31, 2012 and 2013, we have not recognized any receivables for recoveries.

We do not know and cannot estimate the exact time frame over which we will make payments for our accrued environmental and related costs. The timing of payments depends upon a number of factors, including but not limited to the timing of the actual remediation process; which in turn depends on factors outside of our control. At each balance sheet date, we estimate the amount of our accrued environmental and related costs which we expect to pay within the next twelve months, and we classify this estimate as a current liability. We classify the remaining accrued environmental costs as a noncurrent liability.

The table below presents a summary of the activity in our accrued environmental costs during the past three years. The amount charged to expense is included in corporate expense on our Consolidated Statements of Operations.

	Years ended December 31,		
	2011	2012	2013
	(In millions)		
Balance at the beginning of the year	$42.3	$43.2	$50.2
Additions charged to expense, net	11.3	15.0	69.0
Acquired	—	—	7.0
Payments, net	(10.4)	(8.1)	(3.4)
Changes in currency exchange rates	—	.1	(.1)
Balance at the end of the year	$43.2	$50.2	$122.7
Amounts recognized in our Consolidated Balance Sheet at the end of the year:			
Current liabilities	$8.6	$7.6	$9.1
Noncurrent liabilities	34.6	42.6	113.6
Total	$43.2	$50.2	$122.7

NL—Of the $11.3 million net additions charged to expense in 2011, $5.6 million relates to certain payments which have been discounted to their present value because the timing and amounts of such payments are fixed and determinable. Such payments aggregate $6.0 million on an undiscounted basis ($2.0 million that was paid in 2012, $1.0 million that was paid in 2013 and $1.0 million due in each of 2014 through 2016) and were discounted to present value using a 3.0% discount rate. The aggregate $.4 million discount is being charged to expense using the interest method in 2011 through 2016, and the amount of such discount charged to expense in any individual year is not material.

On a quarterly basis, NL evaluates the potential range of its liability for environmental remediation and related costs at sites where it has been named as a PRP or defendant. At December 31, 2013, NL had accrued approximately $114 million related to approximately 45 sites associated with remediation and related matters that it believes are at the present time and/or in their current phase reasonably estimable. The upper end of the range of reasonably possible costs to NL for remediation and related matters for which we believe it is possible to estimate costs is approximately $154 million, including the amount currently accrued.

NL believes that it is not possible to estimate the range of costs for certain sites. At December 31, 2013, there were approximately 5 sites for which NL is not currently able to estimate a range of costs. For these sites, generally the investigation is in the early stages, and NL is unable to determine whether or not NL actually had any association with the site, the nature of its responsibility, if any, for the contamination at the site and the extent of contamination at and cost to remediate the site. The timing and availability of information on these sites is dependent on events outside of our control, such as when the party alleging liability provides information to us. At certain of these previously inactive sites, NL has received general and special notices of liability from the EPA and/or state agencies alleging that NL, sometimes with other PRPs, are liable for past and future costs of remediating environmental contamination allegedly caused by former operations. These notifications may assert that NL, along with any other alleged PRPs, are liable for past and/or future clean-up costs. As further information becomes available to us for any of these sites which would allow us to estimate a range of costs, we would at that time adjust our accruals. Any such adjustment could result in the recognition of an accrual that would have a material effect on our consolidated financial statements, results of operations and liquidity.

Other—We have also accrued approximately $9.0 million at December 31, 2013 for other environmental cleanup matters. This accrual is near the upper end of the range of our estimate of reasonably possible costs for such matters.

Insurance coverage claims

We are involved in certain legal proceedings with a number of our former insurance carriers regarding the nature and extent of the carriers' obligations to us under insurance policies with respect to certain lead pigment and asbestos lawsuits. The issue of whether insurance coverage for defense costs or indemnity or both will be found to exist for our lead pigment and asbestos litigation depends upon a variety of factors and we cannot assure you that such insurance coverage will be available.

We have agreements with four former insurance carriers pursuant to which the carriers reimburse us for a portion of our future lead pigment litigation defense costs, and one such carrier reimburses us for a portion of our future asbestos litigation defense costs. We are not able to determine how much we will ultimately recover from these carriers for defense costs incurred by us because of certain issues that arise regarding which defense costs qualify for reimbursement. While we continue to seek additional insurance recoveries, we do not know if we will be successful in obtaining reimbursement for either defense costs or indemnity. Accordingly, we recognize insurance recoveries in income only when receipt of the recovery is probable and we are able to reasonably estimate the amount of the recovery.

In addition to insurance recoveries discussed above, in September 2011 we reached a settlement with one of our insurance carriers in which they agreed to reimburse us for a portion of our past lead pigment litigation defense costs. Substantially all of the $16.9 million in insurance recoveries we recognized in 2011 relate to this settlement.

In October 2005 we were served with a complaint in OneBeacon American Insurance Company v. NL Industries, Inc., et al. (Supreme Court of the State of New York, County of New York, Index No. 603429-05). The plaintiff, a former insurance carrier, sought a declaratory judgment of its obligations to us under insurance policies issued to us by the plaintiff's predecessor with respect to certain lead pigment lawsuits filed against us. In March 2006, the trial court denied our motion to dismiss. In April 2006, we filed a notice of appeal of the trial court's ruling, and in September 2007, the Supreme Court - Appellate Division (First Department) reversed and ordered that the OneBeacon complaint be dismissed. The Appellate Division did not dismiss the counterclaims and cross claims.

In February 2006, we were served with a complaint in Certain Underwriters at Lloyds, London v. Millennium Holdings LLC et al. (Supreme Court of the State of New York, County of New York, Index No. 06/60026). The plaintiff, a former insurance carrier of ours, sought a declaratory judgment of its obligations to us under insurance

policies issued to us by the plaintiff with respect to certain lead pigment lawsuits. This case is currently stayed.

Prior to 2011, we reached partial settlements with the plaintiffs in the two cases discussed above, pursuant to which the two former insurance carriers paid us an aggregate of approximately $7.2 million in settlement of certain counter-claims related to past lead pigment and asbestos defense costs. In connection with these partial

settlements, we agreed to dismiss the case captioned NL Industries, Inc. v. OneBeacon America Insurance Company, et al. (District Court for Dallas County, Texas, Case No. 05-11347), and in January 2009 we filed a notice of non-suit without prejudice in that matter. In March 2010, we filed a complaint in NL Industries, Inc. v. OneBeacon America Insurance Company (Supreme Court of the State of New York, County of New York, Index No. 108881-2009), to address the remaining claims from the New York state cases. In December 2013, we entered into a settlement agreement with OneBeacon, pursuant to which they agreed to reimburse us for certain contested past lead pigment litigation costs in the amount of $3.9 million.

In January 2014, we were served with a complaint in Certain Underwriters at Lloyds, London, et al v. NL Industries, Inc. (Supreme Court of the State of New York, County of New York, Index No. 14/650103). The plaintiff, a former insurance carrier of ours, is seeking a declaratory judgment of its obligations to us under insurance policies issued to us by the plaintiff with respect to certain lead pigment lawsuits. The case is now proceeding in the trial court. We believe the action is without merit and intend to defend NL's rights in this action vigorously.

In February 2014, we were served with a complaint in Zurich American Insurance Company, as successor-in-interest to Zurich Insurance Company, U.S. Branch vs. NL Industries, Inc, and The People of the State of California, acting by and through county Counsels of Santa Clara, Alameda, Los Angeles, Monterey, San Mateo, Solano and Ventura Counties and the city Attorneys of Oakland, San Diego, and San Francisco, et al (Superior Court of California, County of Santa Clara, Case No.: 1-14-CV-259924). The Plaintiff, a former insurance carrier of ours, is seeking an Order of Deposit Under C.C.P § 572. This case is now proceeding in the trial court. We intend to defend NL's coverage rights in this action vigorously.

Other litigation

NL—NL has been named as a defendant in various lawsuits in several jurisdictions, alleging personal injuries as a result of occupational exposure primarily to products manufactured by NL's former operations containing asbestos, silica and/or mixed dust. In addition, some plaintiffs allege exposure to asbestos from working in various facilities previously owned and/or operated by NL. There are 1,130 of these types of cases pending, involving a total of approximately 1,643 plaintiffs. In addition, the claims of approximately 8,298 plaintiffs have been administratively dismissed or placed on the inactive docket in Ohio, Indiana and Texas state courts. We do not expect these claims will be re-opened unless the plaintiffs meet the courts' medical criteria for asbestos-related claims. We have not accrued any amounts for this litigation because of the uncertainty of liability and inability to reasonably estimate the liability, if any. To date, we have not been adjudicated liable in any of these matters. Based on information available to us, including:

- facts concerning historical operations,
- the rate of new claims,
- the number of claims from which we have been dismissed and
- our prior experience in the defense of these matters.

We believe that the range of reasonably possible outcomes of these matters will be consistent with our historical costs (which are not material). Furthermore, we do not expect any reasonably possible outcome would involve amounts material to our consolidated financial position, results of operations or liquidity. We have sought and will continue to vigorously seek, dismissal and/or a finding of no liability from each claim. In addition, from time to time, we have received notices regarding asbestos or silica claims purporting to be brought against former subsidiaries, including notices provided to insurers with which we have entered into settlements extinguishing certain insurance policies. These insurers may seek indemnification from us.

Kronos—In March 2010, Kronos was served with two complaints which were subsequently consolidated as Haley Paint et al. v. E.I. Du Pont de Nemours and Company, et al. (United States District Court, for the District of Maryland, Case

No. 1:10-cv-00318-RDB). A third plaintiff intervened into the case in July 2011. The defendants included Kronos, E.I. Du Pont de Nemours & Company, Huntsman International LLC, Millennium Inorganic Chemicals, Inc. and the National Titanium Dioxide Company Limited (d/b/a Cristal). Plaintiffs sought to represent a class consisting of all persons and entities that purchased titanium dioxide in the United States directly from one or more of the defendants on or after March 1, 2002. The complaint alleged that the defendants conspired

and combined to fix, raise, maintain, and stabilize the price at which titanium dioxide was sold in the United States and engaged in other anticompetitive conduct. In May 2010, defendants filed a motion to dismiss, which plaintiffs opposed. In March 2011, the court denied the motion to dismiss. In February 2012, the plaintiffs submitted their motion for class certification, which defendants opposed. In August 2012, the court granted the plaintiffs' motion for class certification and trial was set for September 2013. On September 10, 2013, and following the agreement by the three other defendants in the third quarter of 2013 to enter into settlement agreements with the class plaintiffs, Kronos also entered into a settlement agreement with the class plaintiffs, without admitting any fault or wrongdoing, and agreed to pay an aggregate of $35 million (payable in two installments at specified times, expected to occur by mid-2014). Following the service of the Class Action Fairness Notice and the Order of Final Approval from the court, we, and the other defendants, will be dismissed with prejudice from this matter. Selling, general and administrative expenses in the third quarter of 2013 includes a $35 million charge related to this settlement. See also Note 10.

In March 2013, Kronos was served with the complaint, Los Gatos Mercantile, Inc. d/b/a Los Gatos Ace Hardware, et al v. E.I. Du Pont de Nemours and Company, et al. (United States District Court, for the Northern District of California, Case No. 3:13-cv-01180-SI). The defendants include Kronos, E.I. Du Pont de Nemours & Company, Huntsman International LLC and Millennium Inorganic Chemicals, Inc. Plaintiffs seek to represent a class consisting of indirect purchasers of titanium dioxide in the states of Arizona, Arkansas, California, the District of Columbia, Florida, Hawaii, Illinois, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Mexico, New York, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Tennessee, Utah, Vermont, West Virginia and Wisconsin that indirectly purchased titanium dioxide from one or more of the defendants on or after March 1, 2002. The complaint alleges that the defendants conspired and combined to fix, raise, maintain, and stabilize the price at which titanium dioxide was sold in the United States and engaged in other anticompetitive conduct. This matter had been stayed by the court pending a resolution in the Haley Paint Matter. The case is now proceeding in the trial court. We believe the action is without merit, will deny all allegations of wrongdoing and liability and intend to defend against the action vigorously.

In November 2013, we were served with the complaint, The Valspar Corporation, et al v. E.I. Du Pont de Nemours and Company, et al. (United States District Court, for the District of Minnesota, Case No. 1:13-cv-03214-RHK-L1B). The defendants include us, E.I. Du Pont de Nemours & Company, Huntsman International LLC, Millennium Inorganic Chemicals, Inc. and the National Titanium Dioxide Company Limited (d/b/a Cristal). Plaintiff opted out of the settlement in the original lawsuit, Haley Paint et al. v. E.I. Du Pont de Nemours and Company, et al. (United States District Court, for the District of Maryland, Case No. 1:10-cv-00318-RDB) and filed its own lawsuit against the Defendants. The complaint alleged that the defendants conspired and combined to fix, raise, maintain, and stabilize the price at which titanium dioxide was sold in the United States and engaged in other anticompetitive conduct. The case is now proceeding in the trial court. We believe the action is without merit, will deny all allegations of wrongdoing and liability and intend to defend against the action vigorously.

WCS— Previously, the Lone Star Chapter of the Sierra Club has filed various lawsuits in Texas District Court against the Texas Commission on Environmental Quality ("TCEQ"). WCS has intervened in these lawsuits. These lawsuits challenge our by-product and low-level radioactive waste disposal licenses. Subsequently, the District Court upheld the TCEQ's determination that the Sierra Club lacked standing to pursue a challenge to the by-product disposal license. The Sierra Club appealed. WCS' by-product disposal license remains in effect pending resolution of the appeal.

In May 2012, the same District Court subsequently held that TCEQ erred in denying Sierra Club's request for an administrative contested case hearing regarding the low-level radioactive waste disposal license, and ordered the TCEQ to undertake a contested case hearing in which the Sierra Club could participate. Shortly thereafter, both the TCEQ and WCS appealed the District Court's order with respect to the low-level radioactive waste disposal license, and the District Court's order is suspended. WCS' low-level radioactive waste disposal license remains in effect,

pending resolution of this appeal.

On the same day that WCS filed its appeal with regard to the District Court's order with respect to its low-level radioactive waste disposal license, the Sierra Club filed another lawsuit in the same Texas District Court, challenging a routine TCEQ action relating to administration of the low-level radioactive waste disposal license. On March 7, 2014, the Third District of the Texas Court of Appeals in Austin ruled that the courts do not have jurisdiction over Sierra Club's lawsuit challenging the routine TCEQ action. The Court of Appeals dismissed Sierra

Club's lawsuit. The deadline for Sierra Club to petition for relief from the Texas Supreme Court has not yet passed. Additionally, the Sierra Club filed a petition for writ of injunction with the same Court of Appeals in Austin; that petition was denied.

WCS believes all of these actions by the Sierra Club are without merit and that the Sierra Club has no proper standing to challenge any of its licenses and permits. This position has been reinforced by two recent Texas Supreme Court rulings narrowing the basis for a challenge to environmental permits. WCS intends to continue to defend against any and all such actions vigorously, and to continue to operate its West Texas facilities in accordance with the terms of its licenses and permits.

Other—In addition to the litigation described above, we and our affiliates are involved in various other environmental, contractual, product liability, patent (or intellectual property), employment and other claims and disputes incidental to our present and former businesses. In certain cases, we have insurance coverage for these items, although we do not expect any additional material insurance coverage for our environmental claims.

We currently believe that the disposition of all of these various other claims and disputes, individually or in the aggregate, should not have a material adverse effect on our consolidated financial position, results of operations or liquidity beyond the accruals already provided.

Other matters

Concentrations of credit risk—Sales of TiO_2 accounted for approximately 92% of our Chemicals Segment's sales in 2011, and 90% in each of 2012 and 2013. The remaining sales result from the mining and sale of ilmenite ore (a raw material used in the sulfate pigment production process), and the manufacture and sale of iron-based water treatment chemicals and certain titanium chemical products (derived from co-products of the TiO_2 production processes). TiO_2 is generally sold to the paint, plastics and paper industries. Such markets are generally considered "quality-of-life" markets whose demand for TiO_2 is influenced by the relative economic well-being of the various geographic regions. Our Chemicals Segment sells TiO_2 to over 4,000 customers, with the top ten customers approximating 30% of net sales in 2011, 34% in each of 2012 and 2013. We did not have sales to a single customer comprising 10% or more of our net sales in 2011. In each of 2012 and 2013, one customer, Behr Process Corporation, accounted for approximately 10% of our Chemicals Segment's net sales. The table below shows the approximate percentage of our TiO_2 sales by volume for our significant markets, Europe and North America, for the last three years.

	2011	2012	2013
Europe	53%	47%	49%
North America	32%	35%	33%

Our Component Products Segment's products are sold primarily in North America to original equipment manufacturers. The ten largest customers related to our Component Product's continuing operations accounted for approximately 39% of sales in 2011, 38% in 2012, and 42% in 2013. Harley Davidson, a customer of the Component Products segment, accounted for approximately 13% of that segment's total sales in 2011 and 12% in each of 2012, and 2013. San Mateo Postal Data, accounted for 13% of the Component Products Segment's total sales in 2013.

Our Waste Management Segment's revenues consists of storage and disposal fees at our facility located in Andrews County, Texas. During 2013 we had sales to three customers that exceed 10% of our 2013 net sales: Tennessee Valley Authority (30%), Studsvik, Inc. (15%) and the Department of Energy (10%).

Long-term contracts—Our Chemicals Segment has long-term supply contracts that provide for certain of our TiO_2 feedstock requirements through 2016. The agreements require Kronos to purchase certain minimum quantities of feedstock with minimum purchase commitments aggregating approximately $820 million over the term of the contracts in years subsequent to December 31, 2013. In addition, our Chemicals Segment has other long-term supply and service contracts that provide for various raw materials and services. These agreements require Kronos to purchase certain minimum quantities or services with minimum purchase commitments aggregating approximately $123 million at December 31, 2013.

Operating leases—Our Chemicals Segment's principal German operating subsidiary leases the land under its Leverkusen TiO_2 production facility pursuant to a lease with Bayer AG that expires in 2050. The Leverkusen facility itself, which our Chemicals Segment owns and which represents approximately one-third of its current TiO_2 production capacity, is located within Bayer's extensive manufacturing complex. Kronos periodically establishes the amount of rent for the land lease associated with the Leverkusen facility by agreement with Bayer for periods of at least two years at a time. The lease agreement provides for no formula, index or other mechanism to determine changes in the rent for such land lease; rather, any change in the rent is subject solely to periodic negotiation between Bayer and Kronos. We recognize any change in the rent based on such negotiations as part of lease expense starting from the time such change is agreed upon by both parties, as any such change in the rent is deemed "contingent rentals" under GAAP. Under the terms of a master supply and services agreements a majority-owned subsidiary of Bayer provides raw materials, including chlorine, auxiliary and operating materials, utilities and services necessary to operate the Leverkusen facility. This agreement, as amended, expires in 2017 and will automatically renew for successive three year terms until terminated by either party upon one year's prior notice.

We also lease various other manufacturing facilities and equipment. Some of the leases contain purchase and/or various term renewal options at fair market and fair rental values, respectively. In most cases we expect that, in the normal course of business, such leases will be renewed or replaced by other leases. Net rent expense attributable to continuing operations approximated $13.3 million in 2011, $16.3 million in 2012 and $15.8 million in 2013. At December 31, 2013, future minimum payments under non-cancellable operating leases having an initial or remaining term of more than one year were as follows:

Years ending December 31,	Amount (In millions)
2014	$ 12.5
2015	10.4
2016	5.1
2017	3.6
2018	3.2
2019 and thereafter	23.4
Total[(1)]	$ 58.2

(1) Approximately $18 million of the $58.2 million aggregate future minimum rental commitments at December 31, 2013 relates to Kronos' Leverkusen facility lease discussed above. The minimum commitment amounts for such lease included in the table above for each year through the 2050 expiration of the lease are based upon the current annual rental rate as of December 31, 2013. As discussed above, any change in the rent is based solely on negotiations between Bayer and Kronos, and any such change in the rent is deemed "contingent rentals" under GAAP which is excluded from the future minimum lease payments disclosed above.

Income taxes—Prior to 2011, NL made certain pro-rata distributions to its stockholders in the form of shares of Kronos common stock. All of NL's distributions of Kronos common stock were taxable to NL and NL recognized a taxable gain equal to the difference between the fair market value of the Kronos shares distributed on the various dates of distribution and NL's adjusted tax basis in the shares at the dates of distribution. NL transferred shares of Kronos common stock to us in satisfaction of the tax liability related to NL's gain on the transfer or distribution of these shares of Kronos common stock and the tax liability generated from the use of Kronos shares to settle the tax liability. To date, we have not paid the liability to Contran because Contran has not paid the liability to the applicable tax authority. The income tax liability will become payable to Contran, and by Contran to the applicable tax authority, when the shares of Kronos transferred or distributed by NL to us are sold or otherwise transferred outside the Contran Tax Group or in the event of certain restructuring transactions involving us. We have recognized deferred income taxes for our investment in Kronos common stock.

We and Contran have agreed to a policy providing for the allocation of tax liabilities and tax payments as described in Note 1. Under applicable law, we, as well as every other member of the Contran Tax Group, are each jointly and severally liable for the aggregate federal income tax liability of Contran and the other companies included in the Contran Tax Group for all periods in which we are included in the Contran Tax Group. Contran has agreed, however, to indemnify us for any liability for income taxes of the Contran Tax Group in excess of our tax liability computed in accordance with the tax allocation policy.

Financial assurance associated with Waste Management Segment—Our Waste Management Segment is required to provide certain financial assurances to the Texas government agencies with respect to the decommissioning obligations related to the its facility in West Texas. We and certain of our affiliates have provided or assisted us in providing such financial assurances, see Note 16. Other matters related to the financial assurance associated with our LLRW disposal facilities are discussed below:

- A portion of WCS' required financial assurance associated with its LLRW disposal facilities is in the form of a surety bond issued by a third-party insurance company on its behalf for the benefit of the state of Texas. The value of the surety bond at issuance was $20 million in 2011 and was increased to $23.4 in December 2012 and increased to $32.2 million in December 2013. As part of such surety bond, WCS is required to make quarterly cash payments into a collateral trust of 2.5% of the total value of the bonds which commenced in the fourth quarter of 2011. At December 31, 2013, we had made payments totaling $4.9 million, which is reflected as part of our noncurrent restricted cash on our Consolidated Balance Sheet.
- During November of each of 2012 through 2016, WCS is required to make cash payments into another collateral trust or increase the $32.2 million surety bond discussed above for the benefit of the state of Texas in an aggregate of $12.35 million, plus an amount for the estimated increase in the required financial assurance amount associated with normal inflationary cost increases. In addition, in November 2016 WCS is required to make an additional cash payment of $119.5 million into this collateral trust. At that point, the collateral trust would be fully funded, and we would expect that we would only be required to make additional cash payments into the collateral trust to cover normal inflationary cost increases in order for the trust to remain fully funded. Until such time as we make the $119.5 million cash payment in November 2016, the aggregate market value of the marketable securities pledged on WCS' behalf by Valhi (see Note 16) is required to be at least a specified minimum amount. In the event such aggregate market value were to become less than such specified minimum amount, then Valhi would either pledge additional marketable securities sufficient to cover any market-value deficiency, or we would be required to make a cash payment into the collateral trust to cover such market-value deficiency. During the fourth quarters of 2012 and 2013, we paid $18.0 million into the collateral trust, which is reflected as part of our noncurrent restricted cash on our Consolidated Balance Sheet.

Note 18—Financial instruments:

The following table summarizes the valuation of our short-term investments and financial instruments by the ASC Topic 820 categories as of December 31, 2012 and 2013:

	Fair Value Measurements			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Asset (liability)				
December 31, 2012:				
Marketable securities:				
Current	$.9	$ —	$ .9	$ —
Noncurrent	256.8	3.5	3.3	250.0

Currency forward contracts	1.8	1.8	—	—
December 31, 2013:				
Marketable securities:				
Current	$3.8	$ 2.4	$ 1.4	$ —
Noncurrent	253.3	1.4	1.9	250.0
Currency forward contracts	(1.0)	(1.0)	—	—

See Note 4 for information on how we determine the fair value of our marketable securities.

Certain of our sales generated by Chemicals Segment's non-U.S. operations are denominated in U.S. dollars. Our Chemicals Segment periodically uses currency forward contracts to manage a very nominal portion of currency exchange rate risk associated with trade receivables denominated in a currency other than the holder's functional currency or similar exchange rate risk associated with future sales. We have not entered into these contracts for trading or speculative purposes in the past, nor do we currently anticipate entering into such contracts for trading or speculative purposes in the future. Derivatives used to hedge forecasted transactions and specific cash flows associated with financial assets and liabilities denominated in currencies other than the U.S. dollar and which meet the criteria for hedge accounting are designated as cash flow hedges. Consequently, the effective portion of gains and losses is deferred as a component of accumulated other comprehensive income (loss) and is recognized in earnings at the time the hedged item affects earnings. Contracts that do not meet the criteria for hedge accounting are marked-to-market at each balance sheet date with any resulting gain or loss recognized in income currently as part of net currency transactions. The fair value of the currency forward contracts is determined using Level 1 inputs based on the currency spot forward rates quoted by banks or currency dealers.

At December 31, 2013, Kronos had currency forward contracts to exchange:

- an aggregate of $36.0 million for an equivalent value of Canadian dollars at an exchange rate ranging from Cdn. $1.02 to Cdn. $1.06 per U.S. dollar. These contracts with Wells Fargo Bank, N.A. mature from January 2014 through December 2014 at a rate of $3.0 million per month, subject to early redemption provisions at our option;
- an aggregate $20.0 million for an equivalent value of Norwegian kroner at exchange rates ranging from kroner 6.12 to kroner 6.25 per U.S. dollar. These contracts with DnB Nor Bank ASA mature at a rate of $5.0 million per month in certain months from January 2014 through October 2014; and
- an aggregate €20.0 million for an equivalent value of Norwegian kroner at exchange rates ranging from kroner 8.04 to kroner 8.41 per euro. These contracts with DnB Nor Bank ASA mature at a rate of €5.0 million per month in certain months from January 2014 through October 2014.

The estimated fair value of such currency forward contracts at December 31, 2013 was a $1.0 million net liability of which $.2 million is recognized as part of accounts and other receivables and $1.2 million is recognized as part of accounts payable and accrued liabilities in our Consolidated Balance Sheet with a corresponding $1.0 million currency transaction loss in our Consolidated Statement of Operations, (2012—$1.8 million net asset, recognized as part of accounts and other receivables with a corresponding $1.8 million currency transaction gain in our Consolidated Statement of Operations). We did not use hedge accounting for any of our contracts to the extent we held such contracts during 2011, 2012 and 2013.

The following table presents the financial instruments that are not carried at fair value but which require fair value disclosure as of December 31, 2012 and 2013:

	December 31, 2012		2013	
	Carrying amount	Fair value	Carrying amount	Fair value
	(In millions)			
Cash, cash equivalents and restricted cash equivalents	$395.9	$395.9	$186.8	$186.8
Deferred payment obligation	—	—	8.2	8.2
Long-term debt (excluding capitalized leases):				
Kronos note payable to Contran	$—	$ —	$170.0	$170.0
Kronos term loan	384.5	396.8	—	—
Snake River Sugar Company fixed rate loans	250.0	250.0	250.0	250.0
WCS fixed rate debt	77.1	77.1	72.4	72.4
Valhi Contran credit facility	157.6	157.6	206.5	206.5
Kronos variable rate bank credit facilities	13.2	13.2	11.1	11.1
CompX variable rate promissory note	18.5	18.5	—	—
Tremont promissory note	—	—	19.1	19.1
BMI bank note payable	—	—	11.2	11.2
Landwell note payable to the City of Henderson	—	—	3.1	3.1
Noncontrolling interest in:				
Kronos common stock	$267.0	$442.6	$241.9	$431.6
NL common stock	77.8	94.8	74.5	92.6
CompX common stock	13.3	23.4	13.6	23.1
Valhi stockholders' equity	$733.6	$4,238.9	$601.3	$5,961.7

The fair value of our publicly-traded marketable securities, noncontrolling interest in NL, Kronos and CompX and our common stockholders' equity are all based upon quoted market prices, Level 1 inputs at each balance sheet date. At December 31, 2012, the estimated market price of Kronos' term loan was $1,017.5 per $1,000 principal amount. The fair value of the 6 term loan was based on quoted market prices; however, these quoted market prices represent Level 2 inputs because the markets in which the term loan trade were not active. The fair value of our fixed-rate nonrecourse loans from Snake River Sugar Company is based upon the $250 million redemption price of our investment in the Amalgamated Sugar Company LLC, which collateralizes the nonrecourse loans, (this is a Level 3 input). Fair values of variable interest rate notes receivable and debt and other fixed-rate debt are deemed to approximate book value. Due to their near-term maturities, the carrying amounts of accounts receivable and accounts payable are considered equivalent to fair value. See Notes 4 and 9.

Note 19—Quarterly results of operations (unaudited):

	Quarter ended			
	March 31	June 30	Sept. 30	Dec. 31
	(In millions, except per share data)			
Year ended December 31, 2012				
Net sales	$582.8	$568.4	$508.7	$427.4
Gross margin	260.4	162.1	97.4	55.3
Operating income (loss)	203.3	103.2	41.1	(2.2)
Net income	$119.6	$61.5	$31.8	$9.2
Amounts attributable to Valhi stockholders:				
Income (loss) from continuing operations	$88.5	$43.7	$21.8	$(12.6)
Income from discontinued operations	.5	.6	1.2	16.1
Net income[1]	$89.0	$44.3	$23.0	$3.5
Earnings per share:				
Income (loss) from continuing operations	$.26	$.13	$.06	$(.04)
Income from discontinued operations	—	—	.01	.05
Net income	$.26	$.13	$.07	$.01
Year ended December 31, 2013				
Net sales	$499.2	$516.1	$448.2	$400.1
Gross margin	12.9	17.2	48.6	55.5
Operating income (loss)	(45.2)	(46.8)	(42.5)	(4.2)
Net income (loss)	$(48.2)	$(48.6)	$(40.9)	$10.8
Amounts attributable to Valhi stockholders:				
Net income (loss)[2]	$(39.8)	$(39.7)	$(34.2)	$15.7
Earnings per share:				
Net income (loss)	$(.12)	$(.12)	$(.10)	$.05

[1] We recognized the following amounts during 2012:

- a $3.7 million after-tax and noncontrolling interest loss on the prepayment of debt in the second quarter, see Note 9;
- a $7.8 million after-tax and noncontrolling interest real-estate related litigation settlement gain in the second quarter, see Note 15;
- a $13.2 million after-tax and noncontrolling interest securities transaction gain in the fourth quarter, see Note 4;
- a $5.3 million net of noncontrolling interest charge in the fourth quarter for a goodwill impairment, see Note 8;
- an $.8 million after-tax and noncontrolling interest charge in the primarily in the fourth quarter as a result of an asset held for sale write-down, see Note 7;
- an $1.7 million after-tax and noncontrolling interest gain on sale of excess property in the fourth quarter, see Note 15; and
- an incremental tax charge of $6.1 million (net of noncontrolling interest) in the fourth quarter as a result of a change in circumstances related to our sale of TIMET common stock, which sale provided an opportunity for us to elect to claim foreign tax credits, we determined that we could tax-efficiently remit non-cash dividends from our non-U.S. jurisdictions before the end of the year that absent the TIMET sale would not have been considered. Our provision for income taxes recognized in the fourth quarter also includes a $2.1 million expense (net of noncontrolling interest) related to an increase in our reserve for uncertain tax positions. In addition, an aggregate $2.7 million (net of noncontrolling interest) of such fourth quarter 2012 provision for income taxes is a correction of amounts that should have been recognized in the third quarter of 2011 and is not material to any current or prior periods.

(2) We recognized the following amounts during 2013:

- a $3.4 million after-tax and noncontrolling interest charge related to the February voluntary prepayment of an aggregate $290 million principal amount of Kronos' term loan in the first quarter; see Note 9;
- a $17.9 million after-tax and noncontrolling interest litigation settlement charge included in operating income in the third quarter; see Note 17;
- a $1.2 million after-tax and noncontrolling interest charge related to the July voluntary prepayment of the remaining $100 million principal amount of Kronos' term loan in the third quarter; see Note 9;
- pre-tax charges aggregating approximately $28 million consisting of unabsorbed fixed production and other costs as a result of Kronos' Canadian plant lockout in the third and fourth quarters of approximately $19 million, $7 million as a result of the pension curtailment charge discussed in Note 11, and $2 million for severance and other back-to-work expenses associated with reaching terms of the new Canadian collective bargaining agreement. Approximately $7 million of the costs (primarily related to unabsorbed fixed production costs) related to the third quarter of 2013 with the remaining costs recognized in the fourth quarter of 2013;
- aggregate insurance recoveries of $4.7 million, after-tax and noncontrolling interest in the fourth quarter; and
- a $46.6 million after-tax gain on bargain purchase and remeasurement of existing investment related to our acquisition of a controlling interest in BMI and Landwell; see Notes 3 and 12.

The sum of the quarterly per share amounts may not equal the annual per share amounts due to relative changes in the weighted average number of shares used in the per share computations.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VALHI, INC.

(Registrant)

By: /s/ Steven L. Watson
Steven L. Watson, March 17, 2014
(Chairman, President and Chief Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated:

/s/ Thomas E. Barry	/s/ Steven L. Watson
Thomas E. Barry, March 17, 2014	Steven L. Watson, March 17, 2014
(Director)	(Chairman, President and Chief Executive Officer)
/s/ Norman S. Edelcup	/s/ Bobby D. O'Brien
Norman S. Edelcup, March 17, 2014	Bobby D. O'Brien, March 17, 2014
(Director)	(Executive Vice President and Chief Financial Officer and Director, Principal Financial Officer)
/s/ W. Hayden McIlroy	/s/ Gregory M. Swalwell
W. Hayden McIlroy, March 17, 2014	Gregory M. Swalwell, March 17, 2014
(Director)	(Executive Vice President and Controller, Principal Accounting Officer)

/s/ Loretta J. Feehan	/s/ William J. Lindquist
Loretta J. Feehan, March 17, 2014	William J. Lindquist, March 17, 2014
(Director)	(Executive Vice President and Director)