EXHIBIT 4

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934—For the fiscal year ended December 31, 2015**

Commission file number 1-5467

VALHI, INC.

(Exact name of Registrant as specified in its charter)

Delaware (State or other jurisdiction of Incorporation or organization)	**87-0110150** (IRS Employer Identification No.)
5430 LBJ Freeway, Suite 1700, Dallas, Texas (Address of principal executive offices)	**75240-2697** (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 ($.0 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 ☒

If the Registrant is not required to file reports pursuant to Section 3 or Section 5(d) of the Act. Yes ☐ No ☒

Whether the Registrant ( ) has filed all reports required to be filed by Section 3 or 5(d) of the Securities Exchange Act of 934 during the preceding 2 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

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 2 months (or for such shorter period that the registrant was required to submit and post such files). Yes ☒ 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 0 K or any amendment to this Form 0 K. Yes ☐ No ☒

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 2b 2 of the Act).

Large accelerated filer	☐	Accelerated filer	☒
Non accelerated filer	☐	Smaller reporting company	☐

Whether the Registrant is a shell company (as defined in Rule 2b 2 of the Act). Yes ☐ No ☒

The aggregate market value of the 9 million shares of voting common stock held by nonaffiliates of Valhi, Inc. as of June 30, 20 5 (the last business day of the Registrant's most recently completed second fiscal quarter) approximated $ 08 2 million.

As of March 4, 20 6, 339, 42,949 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 4A not later than 20 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 700, Dallas, Texas 75240 Our telephone number is (972) 233 700 We maintain a worldwide website at www valhi net

Brief History

LLC Corporation, our legal predecessor, was incorporated in Delaware in 932 We are the successor company of the 987 merger of LLC Corporation and another entity controlled by Contran Corporation One of Contran's wholly owned subsidiaries held approximately 93% of Valhi's outstanding common stock at December 3 , 20 5 As discussed in Note to our Consolidated Financial Statements, Lisa K Simmons and Serena Simmons Connelly may be deemed to control Contran and us

Key events in our history include:

- 979 Contran acquires control of LLC;
- 98 Contran acquires control of our other predecessor company;
- 982 Contran acquires control of Keystone Consolidated Industries, Inc , a predecessor to CompX;
- 984 Keystone spins off an entity that includes what is to become CompX; this entity subsequently merges with LLC;
- 986 Contran acquires control of NL, which at the time owns 00% of Kronos and a 50% interest in Titanium Metals Corporation ("TIMET");
- 987 LLC and another Contran controlled company merge to form Valhi, our current corporate structure;
- 988 NL spins off an entity that includes its investment in TIMET;
- 995 WCS begins start up operations;
- 996 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 ("LLRW") and completes construction of the byproduct facility;
- 20 0 Kronos completes a secondary offering of its common stock lowering our ownership of Kronos to 80%;
- 20 WCS begins construction on its Compact and Federal "LLRW" and mixed LLRW disposal facilities;
- 20 2 WCS completes construction of its Compact and Federal LLRW disposal facilities and commences operations at the Compact facility;
- 20 2 In December we sell all of our remaining interest in TIMET and TIMET is no longer our affiliate;
- 20 2 In December CompX completes the sale of its furniture components business;
- 20 3 WCS commences operations at the Federal LLRW facility;

- 20 3 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 3 , 20 3;
- 20 5 The first homes in our Cadence planned community were completed by third party builders and sold to the public; and
- 20 5 In November we entered into an agreement for the sale of WCS which is expected to close in the first half of 20 6

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 0 K contains forward looking statements within the meaning of the Private Securities Litigation Reform Act of 995, 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 capacity expansion (such as the TiO_2 industry);
- Changes in raw material and other operating costs (such as energy, ore, zinc and brass 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 and substitute products, 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 difficulties in integrating future acquisitions;
- Potential difficulties in upgrading or implementing new accounting and manufacturing software systems;
- 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 or other currencies;
- Operating interruptions (including, but not limited to, labor disputes, leaks, natural disasters, fires, explosions, unscheduled or unplanned downtime, transportation interruptions and cyber attacks);
- Decisions to sell operating assets other than in the ordinary course of business;
- 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, the benefits of which may not presently have been recognized under the more likely than not recognition criteria;
- 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 possible future challenge to WCS' operating licenses and permits;
- Unexpected delays in the operational start up of shipping containers procured by WCS;
- Changes in real estate values and construction costs in Henderson, Nevada;
- Water levels in Lake Mead; 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 four consolidated reportable operating segments at December 3 , 20 5:

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 ("TiO2") TiO2 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 security products used in the recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries CompX is also a leading manufacturer of stainless steel exhaust systems, gauges, throttle controls and trim tabs for the recreational marine industry
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 LLRW disposal license in September 2009 The Compact LLRW disposal facility commenced operations in 20 2, and the Federal LLRW commenced operations in 20 3 We reached an agreement for the sale of our Waste Management Segment in November 20 5 See Note 3 to our Consolidated Financial Statements
Real Estate Management and Development Basic Management, Inc and The LandWell Company	We operate in real estate management and development through our majority control of BMI and LandWell BMI provides utility services to certain industrial and municipal customers and owns real property in Henderson, Nevada. LandWell is engaged in efforts to develop certain land holdings for commercial, industrial and residential purposes in Henderson, Nevada In December 20 3, we acquired a controlling interest in each of these companies, and they are included in our results of operations and cash flows beginning on January , 20 4 See Note 3 to our Consolidated Financial Statements

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 titanium dioxide pigments, or TiO2, a base industrial product used in a wide range of applications We, along with our distributors and agents, sell and provide technical services for our products to approximately 4,000 customers in 00 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

TiO2 is a white inorganic pigment used in a wide range of products for its exceptional durability and its ability to impart whiteness, brightness and opacity TiO2 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 TiO2 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 TiO2 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 3 0% since 990 Per capita consumption of TiO_2 in Western Europe and the United States 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 Western Europe and North America currently account for approximately 20% and 8% 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

Products and End-use Markets

Including our predecessors, we have produced and marketed TiO_2 in North America and Europe, our primary markets, for almost 00 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

	2013	2014	2015
Europe	8%	8%	8%
North America	8%	7%	5%

We believe 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 20 5 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 20 5 We and our agents and distributors primarily sell our products in three major end use markets: coatings, plastics and paper

The following tables show our approximate TiO_2 sales volume by geographic region and end use for the year ended December 3 , 20 5:

Sales volumes percentages by geographic region		Sales volumes percentages by end-use	
Europe	52%	Coatings	55%
North America	29%	Plastics	3 %
Asia Pacific	8%	Other	9%
Rest of World	%	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 commercial and residential 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

TiO2 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

TiO2 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

TiO2 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 0% of our net sales in 20 5:

- 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, and we sell an ilmenite based specialty product to the oil and gas industry 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 20 5, chloride process production facilities represented approximately 49% 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 528,000 metric tons of TiO_2 in 20 5, up from the 5 ,000 metric tons we produced in 20 4 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 approximately 86%, 92% and 95% of capacity in 20 3, 20 4 and 20 5, respectively Our production utilization rates in 20 3 were impacted by the previously reported lockout at our Canadian production facility that began in June 20 3 We operated our Canadian plant at approximately 5% of the plant's capacity with non union management employees during the lockout Our production rates in 20 4 were also impacted by such lockout, as restart of production at the facility did not begin until February 20 4 Our production rates in 20 4 and in the first quarter of 20 5 were also impacted by the implementation of certain productivity enhancing improvement projects at other facilities, as well as necessary improvements to ensure continued compliance with our permit regulations, which resulted in longer than normal maintenance shutdowns in some instances

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 20 5 was 555,000 metric tons, approximately three fourths of which was from the chloride production process

The following table presents the division of our expected 20 6 manufacturing capacity by plant location and type of manufacturing process:

		% of capac ty by T O2 manufactur ng process	
Fac l ty	Descr pt on	Chlor de	Sulfate
Leverkusen, Germany ( )	TiO_2 production, chloride and sulfate process, co products	39%	25%
Nordenham, Germany	TiO_2 production, sulfate process, co products		39
Langerbrugge, Belgium	TiO_2 production, chloride process, co products, titanium chemicals products	2	
Fredrikstad, Norway (2)	TiO_2 production, sulfate process, co products		23
Varennes, Canada	TiO_2 production, chloride and sulfate process, slurry facility, titanium chemicals products	2	3
Lake Charles, LA, US (3)	TiO_2 production, chloride process	9	
Total		00%	00%

( ) 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 2% over the past ten years due to debottlenecking programs, with only moderate capital expenditures We believe that our annual attainable production capacity for 20 6 is approximately 555,000 metric tons, and we currently expect our production capacity rate will be at near capacity levels in 20 6

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, unless we and Huntsman otherwise agree (such as in 20 5, when we purchased approximately 52% of the production from the plant)

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 feedstock (purchased natural rutile ore or slag) 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 Note 7 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 Limited under a long term supply contract that expires at the end of 20 8, subject to two year renewal periods if both parties agree We also purchase upgraded slag from Rio Tinto Iron and Titanium Limited under a long term supply contract that expires at the end of 20 9 We purchase natural rutile ore under contracts primarily from Iluka Resources, Limited and Sierra Rutile Limited, all of which expire in 20 6 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, 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 20 5 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 purchase sulfate grade slag primarily from Rio Tinto Fer et Titane Inc under a supply contract that renews annually, subject to termination upon twelve months written notice We expect the raw materials purchased under these contracts, and contracts that we may enter into, 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 20 5

Produc on process/raw mater al	Raw mater als procured or m ned
	(In thousands of metr c tons)
Chloride process plants	
Purchased slag or rutile ore	45
Sulfate process plants:	
Ilmenite ore mined and used internally	323
Purchased slag	0

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 customer and technical service to the customers who purchase our products through distributors as well as to our larger customers serviced by our direct sales force

We sell to a diverse customer base with only one customer representing 0% or more of our sales in 20 5 (Behr Process Corporation 0%) Our largest ten customers accounted for approximately 34% of sales in 20 5

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 20 5, 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 The Chemours Company, or Chemours (which was spun off from E I du Pont de Nemours & Co into a separate publicly traded company in 20 5); Millennium Inorganic Chemicals, Inc (a subsidiary of National Titanium Dioxide Company Ltd), or Cristal; Huntsman Corporation; and Tronox Incorporated The top five TiO_2 producers (i e we and our four principal competitors) account for approximately 56% of the world's production capacity Huntsman completed its purchase of the TiO_2 business of Sachtleben Chemie GmbH in 20 4, and has also announced its intent to exit the TiO_2 business by December 3 , 20 6 In February 20 5, Huntsman announced a plan to reduce its TiO_2 capacity by approximately 00,000 metric tons at one of its European sulfate process facilities In August 20 5, Chemours announced plans to close its plant in Delaware and shut down a production line at its facility in Tennessee, reducing its overall capacity by approximately 50,000 metric tons

The following chart shows our estimate of worldwide production capacity in 20 5:

Worldw de product on capac ty—2015	
Chemours	.7%
Huntsman	.2%
Cristal	.2%
Kronos	8%
Tronox	7%
Other	44%

Chemours 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 Chemours has announced the scheduled production start up of a 200,000 metric ton line at its plant in Mexico in mid 20 6 Although overall industry demand is expected to be generally higher in 20 6 as compared to 20 5 as a result of improving worldwide economic conditions, we do not expect any other significant efforts will be undertaken by us or our principal 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 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 $ 8 million in 20 3, $ 9 million in 20 4 and $ 6 million in 20 5 We expect to spend approximately $ 4 million on research and development in 20 6

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 20 0, we have added seven 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 9 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, including data security 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 3 , 20 5, we employed the following number of people:

Europe	,890
Canada	345
United States ( )	45
Total	2,280

( ) 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 In Canada, our union employees are covered by a collective bargaining agreement that expires in June 20 8 At December 3 , 20 5, approximately 87% 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 ("CERCLA"), 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 $6 9 million in 20 5 and are currently expected to be approximately $9 million in 20 6

COMPONENT PRODUCTS SEGMENT COMPX INTERNATIONAL INC.

Business Overview

Through our majority controlled subsidiary, CompX, we are a leading manufacturer of security products used in the recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries CompX is also a leading manufacturer of stainless steel exhaust systems, gauges, throttle controls, and trim tabs for the recreational marine industry Our products are principally designed for use in medium to high end product applications, where design, quality and durability are valued by our customers

Manufacturing, Operations and Products

Security Products CompX's security products 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, electronic circuit panels, storage compartments and gas station security CompX's security products reporting unit has one manufacturing facility in Mauldin, South Carolina and one in Grayslake, Illinois shared with its marine components reporting unit 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) *TuBar*® and *Turbine*™; and
- our innovative *CompX eLock*® and *StealthLock*® electronic 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 reporting unit's 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 and smaller original equipment manufacturer distributors via our *STOCK LOCKS*® distribution program

Marine Components CompX's marine components reporting unit manufactures and distributes stainless steel exhaust components, gauges, throttle controls, trim tabs, hardware and accessories primarily for performance and ski/wakeboard boats CompX's marine components reporting unit has a facility in Neenah, Wisconsin and a facility in Grayslake, Illinois shared with its security products reporting unit 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 3 , 20 5 as shown below For additional information, see also "Item 2 Properties", including information regarding leased and distribution only facilities

Fac l ty Name	Report ng Un t	Locat on	S ze (square feet)
Owned Facilities:			
National (1)	SP	Mauldin, SC	98,000
Grayslake(1)	SP/MC	Grayslake, IL	33,000
Custom(2)	MC	Neenah, WI	95,000
Leased Facilities:			
Distribution Center	SP/MC	Rancho Cucamonga, CA	,500

(1) ISO 900 registered facilities
(2) ISO 9002 registered facility

Raw Materials

CompX's primary raw materials are:

- zinc and brass (used in the security products reporting unit for the manufacture of locking mechanisms); and
- stainless steel (used primarily in the marine components reporting unit for the manufacture of exhaust headers and pipes), aluminum (used for the manufacture of throttles and trim tabs), and other components)

These raw materials are purchased from several suppliers, are readily available from numerous sources and accounted for approximately 0% of CompX's total cost of sales for 20 5 Total material costs, including purchased components, represented approximately 48% of CompX's cost of sales in 20 5

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 help us to stabilize our commodity related raw material costs to a certain extent We periodically enter into such arrangements for zinc and brass Following a general softening of commodity metal markets during 20 5, we expect commodity related raw material prices to remain relatively stable during 20 6; however, 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 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 we believe 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 from less than year to 7 years at December 3 , 20 5 Our major trademarks and brand names in addition to *CompX®* include:

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

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 substantial portion of our security products reporting unit's 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 20 5, our ten largest customers, all customers of our security products reporting unit, accounted for approximately 48% of our total sales United States Postal Service and Harley Davidson accounted for approximately 3% and 2%, respectively, of total sales for the year ended December 3 , 20 5 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 ("Environmental Laws") 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

Employees

As of December 3 , 20 5, we employed 5 2 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

On November 8, 20 5, we entered into an agreement with Rockwell Holdco, Inc ("Rockwell"), for the sale of WCS to Rockwell for $270 million in cash, $20 million face amount in Series A Preferred Stock of Rockwell plus the assumption of all of WCS' third party indebtedness incurred prior to the date of the agreement Additionally, Rockwell and its affiliates will assume all financial assurance obligations related to the WCS business We have agreed to covenants relating to our Waste Management Segment's conduct of its business until the closing of the sale Rockwell is the parent company of Energy*Solutions*, Inc Completion of the sale is subject to certain customary closing conditions, including the receipt of U S anti trust approval, and is expected to close in the first half of 20 6, assuming all closing conditions are satisfied There can be no assurance that any such sale of WCS would be completed See Note 3 to our Consolidated Financial Statements

Business Overview

Our Waste Management Segment was formed in 995, and in early 997 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 997 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 20 The Compact LLRW site was fully certified and operational in April 20 2 The Federal LLRW site was fully certified and operational in September 20 2 and received its first waste for disposal in 20 3

Facility, Operations and Services

Our Waste Management Segment operates one waste management facility located on a ,338 acre site in West Texas The facility is permitted for 3 8 million cubic yards of airspace landfill capacity for the disposal of RCRA, Toxic Substance Control Act ("TSCA"), Byproduct and LLRW and mixed LLRW wastes We also own approximately 3,000 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 20 Both facilities were fully certified and operational in 20 2 We accepted our first Compact waste disposal shipments in April 20 2, but routine Compact disposal receipts did not occur until July 20 2 We received a national disposal contract for our Federal LLRW disposal facility from the Department of Energy ("DOE") in April 20 3, and we have regularly received waste for disposal in the Federal LLRW disposal facility since the end of the second quarter of 20 3
- *LLRW Treatment/Storage* In November 997, 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 998

- *RCRA/Exempt.* Our Waste Management Segment has permits from the TCEQ to accept hazardous wastes governed by RCRA, for treatment, storage and/or disposal In March 20 5, we submitted our renewal application for our RCRA permit for a new ten year period The application is still pending, but we are permitted to continue to accept hazardous waste governed by RCRA while under review We have obtained additional authority to dispose of certain categories of LLRW, including naturally occurring radioactive material ("NORM") and waste that is exempt from radioactive waste disposal regulations (radioactive materials that do not exceed certain specified radioactive concentrations and are exempt from licensing) Waste disposed of under these permits and authorizations are disposed of in what we call the "RCRA landfill "
- *TSCA.* Our Waste Management Segment has permits from the U S Environmental Protection Agency ("EPA") to accept toxic wastes governed by TSCA for treatment, storage and/or disposal In May 20 5, we submitted our application for renewal of our five year TSCA authorization for a new five year period beginning in 20 5 (which application is still pending, but we are permitted to continue to accept toxic waste pending receipt of the new five year authorization), and in 20 2 our TSCA authorization was amended to include our Federal LLRW disposal facility
- *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

In February 20 5, we sent a notification to the Nuclear Regulatory Commission ("NRC") expressing our intent to apply for a license for the interim storage of used nuclear fuel at our facility Currently used nuclear fuel is stored at 63 locations in 33 states If approved and constructed, we would become the nation's first centralized storage facility for such high level waste We currently expect to submit a final license application by April 20 6, and currently expect the licensing, regulatory requirements and construction process to be completed by December 2020 If approved and completed, we believe the storage facility will further enhance our one stop shop for radioactive waste to provide a comprehensive disposal and storage solution for the entire range of waste produced in the nuclear fuel cycle for our customers There can be no assurance that we would be successful in obtaining any license for such interim storage of used nuclear fuel

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 20 5, we had sales to five customers that exceed 0% of our net sales: Exelon Generation (9%), U S Department of Energy (6%), Nuclear Waste Partnership (2%), Arizona Public Service (2%), and Zion Solutions (%) We have long term agreements with many of our customers

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 waste 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

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

This price competition resulted in minimal use of our RCRA landfill in the past Beginning in 20 4, we gained the ability to accept a broader range of waste for disposal in the RCRA landfill This has increased the use of our RCRA landfill because it has allowed us to be more competitive for "exempt waste," which is hazardous waste that possesses very low levels of radioactivity and has been exempted by law from management and disposal requirements applicable to LLRW We believe our broad range of permits for the treatment, storage and disposal of exempt waste, LLRW and mixed LLRW streams may position us better than our competitors and are a key element of our long term strategy to provide "one stop shopping" for exempt waste, LLRW and mixed LLRW

The LLRW industry is very competitive Our principal competitors with respect to LLRW are Energy*Solutions*, Inc , US Ecology Inc , and Perma Fix Environmental Services, Inc These competitors are well established, and some may have significantly greater resources than we do, which could be important factors to our potential customers We believe we may be better positioned than our competitors due to our environmentally desirable location, a 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

LLRW, mixed LLRW and exempt waste can be and currently is stored in numerous sites around the country and, alternatively, generators can dispose of LLRW, mixed LLRW and exempt waste in facilities operated by us and our competitors Many of our customers store these waste streams onsite, which serves as an alternative to our and our competitors' disposal services

Facilities that dispose of LLRW, mixed LLRW and exempt waste, such as our facility in Texas, are generally subject to the following requirements: (i) commercial LLRW disposal facilities can only be licensed by the 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 a 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 Further, certain LLRW disposal sites are restricted from accepting 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") Our facility may accept Class B or C LLRW from generators that are not located in a Compact

Other commercial options are, and may in the future become, available for the disposal of Class B and C LLRW One such option offered by one of our competitors is the "downblending" of Class B and C LLRW in order to permit the reclassification and disposal of this waste as Class A LLRW WCS does not offer a downblending option to its customers, and WCS does not support downblending because we believe that direct disposal of Class B and C LLRW results in a more environmentally safe solution that is less complex and less likely to be subject to regulatory changes In addition, the State of Texas does not permit LLRW to be reclassified as a result of downblending

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 renewal was filed in March 20 5 and is under review The TSCA authorization for the RCRA landfill and Federal LLRW disposal facility was filed in May 20 5 and is under review We believe our permits will be renewed in the ordinary course of business Our byproduct material disposal license expires in 20 8 and our LLRW disposal license expires in 2024 Our RCRA permit for the Federal LLRW disposal facility expires in 20 8 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 20 2

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 comply with such developments 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 3 , 20 5, WCS had 96 employees We believe our labor relations are good

REAL ESTATE MANAGEMENT AND DEVELOPMENT SEGMENT BASIC MANAGEMENT, INC. AND THE LANDWELL COMPANY

Business Overview

We acquired a controlling interest in our Real Estate Management and Development Segment in December 20 3 Prior to December 20 3, we owned a 32% interest in BMI, which among other things provides utility services to an industrial park located in Henderson, Nevada, 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 2% interest in LandWell, which is actively engaged in efforts to develop certain real estate in Henderson, Nevada including approximately 2, 00 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use BMI owns an additional 50% interest in LandWell In December 20 3 we completed the acquisition of an additional 3 % ownership interest in BMI and 5% ownership interest in LandWell We completed this acquisition 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 including the 50% ownership interest held by BMI See Notes 3 and 7 to our Consolidated Financial Statements

Operations and Services

Over the years, LandWell and BMI have focused on developing and selling the land transferred to LandWell as part of its formation in the early 950's as well as additional land holdings acquired by LandWell in the surrounding area subsequent to LandWell's formation (although BMI and LandWell have not had significant real property acquisitions since 2004) Since LandWell's formation, LandWell and BMI have a history of successfully developing and selling over ,200 acres of retail, light industrial, commercial and residential projects in the Henderson, Nevada area However, a substantial portion of such projects, had been completed prior to the 2008 economic downturn which was particularly acute in the Las Vegas area real estate market which includes Henderson Following such economic downturn, LandWell's land sales were substantially reduced as compared to prior years, and LandWell did not recognize any material amount of land sales in the 2008 to 20 3 time period During this time period, LandWell focused primarily on the development of a large tract of land in Henderson zoned for residential/planned community purposes (approximately 2, 00 acres) Planning and zoning work on such project began in 2007, but LandWell delayed significant development efforts until economic conditions had improved As general economic conditions improved in 20 and 20 2, LandWell began intensive development efforts of the residential/planned community in 20 3 (with LandWell acting as the master developer for all such development efforts) We market and sell our residential/planned community to established home builders in tracts of land that are pre zoned for a maximum number of home lots We support the builders efforts to market and sell specific residential homes within our residential/planned community through joint marketing campaign and community wide education efforts

In addition, BMI delivers utility services to an industrial park located in Henderson, Nevada and also delivers water to the city of Henderson and various other users through a water delivery system owned by BMI

Sales

Through December 3 , 20 5, LandWell has closed or entered into escrow on approximately 4 0 acres of the residential/planned community and certain other acreage Contracts for land sales are negotiated on an individual basis and sales terms and prices will vary based on such factors as location (including location within a planned community), expected development work and individual buyer needs Although land may be under contract, we do not recognize revenue until we have satisfied the criteria for revenue recognition set forth in Accounting Standards Codification ("ASC") Topic 976 In some instances, we will receive cash proceeds at the time the contract closes and record deferred revenue for some or all of the cash amount received, with such deferred revenue being recognized in subsequent periods Because land held for development was initially recognized at estimated fair value at the acquisition date as required by ASC Topic 805, we do not expect to recognize significant operating income on land sales for the land currently under contract We expect the development work to continue for 0 to 5 years on the rest of the land held for development, consisting primarily of the residential/planned community

Our Real Estate Management and Development Segment's sales consist principally of land sales and water and electric delivery fees During 20 5 we had sales to four customers that each exceeded 0% of our net sales: Richmond Homes of Nevada (27%), LV East Gibson, LLC (7%) and Prologis, LP (%) all relate to land sales; the City of Henderson (5%) relates to our water delivery services

Competition

There are multiple new construction residential communities in the greater Las Vegas, Nevada area We compete with these communities on the basis of location; planned community amenities and features; proximity to major retail and recreational activities; and the perception of quality of life within the new community We believe our residential/planned community is unique within the greater Las Vegas area due to its location and planned amenities which include: 490 acres of major and neighborhood parks and open space interconnected with major regional trails and parks; and features that no other new construction residential community currently offers including builder floorplans designed exclusively for our community We are marketing our residential/planned community to builders who target a range of home buyers to maximize sales

Regulatory and Environmental Matters

We and the subcontractors we use must comply with many federal, state and local laws and regulations, including zoning, density and development requirements, building, environmental, advertising, labor and real estate sales rules and regulations These regulations and requirements affect substantially all aspects of our land development 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

Employees

At December 3 , 20 5, BMI had 24 employees We believe our labor relations are good

OTHER

NL Industries, Inc. At December 3 , 20 5, NL owned 87% of CompX and 30% of Kronos NL also owns 00% of EWI RE, Inc , an insurance brokerage and risk management services company and also holds certain marketable securities and other investments See Note 6 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 BMI and our 77% ownership interest in LandWell Such 77% ownership interest in LandWell includes 27% we hold through our ownership of Tremont and 50% held by a subsidiary of BMI Tremont also owns 00% of Tall Pines Insurance Company, an insurance company that also holds certain marketable securities and other investments See Note 6 to our Consolidated Financial Statements

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 Simmons and Ms Connelly 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 3 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 0 K, quarterly reports on Form 0 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 0 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 00 F Street, NE, Washington, DC 20549 The public may obtain information on the operation of the Public Reference Room by calling the SEC at 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 See also certain risk factors discussed in Item 7 *"Management's Discussion and Analysis of Financial Condition and Results of Operations* Critical Accounting Policies and Estimates" In addition to the potential effect of these risk factors, 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 Our subsidiaries 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 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 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 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 Segment's business is concentrated with the top five TiO_2 producers accounting for over 50% 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 Chemicals Segment's 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 20 2 which carried over into 20 3 We have seen moderation in the purchase cost of third party feedstock ore in 20 3 and throughout 20 4 and 20 5, but such reductions did not begin to be significantly reflected in our cost of sales until the third quarter of 20 3 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

Our Chemicals Segment has long term supply contracts that provide for our TiO2 feedstock requirements that currently expire through 20 9 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 through February 20 6) require us to purchase certain minimum quantities of feedstock with minimum purchase commitments aggregating approximately $865 million in years subsequent to December 3 , 20 5 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 $ 47 million at December 3 , 20 5 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

Certain of the raw materials used in our Component Products Segment's products are commodities that are subject to significant fluctuations in price in response to world wide supply and demand as well as speculative investor activity Zinc and brass are the principal raw materials used in the manufacture of security products Stainless steel tubing is the major raw material used in the manufacture of marine exhaust systems These raw materials are purchased from several suppliers and are generally readily available from numerous sources We occasionally enter into short term raw material supply arrangements to mitigate the impact of future increases in commodity related raw material costs Materials purchased outside of these arrangements are sometimes subject to unanticipated and sudden price increases Should our vendors not be able to meet their contractual obligations or should we be otherwise unable to obtain necessary raw materials, we may incur higher costs for raw materials or may be required to reduce production levels, either of which may decrease our liquidity as we may be unable to offset the higher costs with increases in our selling prices or reductions in other operating costs

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 NL's 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, we do not know if 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, we do not know if 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.

Our Component Products Segment relies on patent, trademark and trade secret laws in the United States and similar laws in other countries to establish and maintain our 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, we do not know if 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. We do not know if 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 Real Estate Management and Development Segment owns a significant amount of real property in Henderson, Nevada. A prolonged downturn in the local real estate market in Nevada could negatively impact our ability to successfully complete the development of such real property.

A substantial portion of the revenues and assets associated with our Real Estate Management and Development Segment relate to certain real estate under development in Henderson, Nevada, including approximately 2, 00 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use. A prolonged downturn in the local real estate market in Nevada or other events could negatively impact our ability to successfully complete the development of such real property, either by requiring us to incur future development costs in excess of our current estimates, or by resulting in selling prices for future retail land sales lower than what we currently expect. If any of these events were to occur, revenue and profits in our Real Estate Management and Development segment may be significantly and negatively affected.

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 Kronos' term loan, our loan from Contran Corporation, our loans from Snake River Sugar Company and the WCS financing capital lease. As of December 3 , 20 5, our total consolidated debt was approximately $960 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 $524 6 million in 20 6. 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 certain of our revolving 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 businesses 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 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 further 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 or our need to obtain emissions permits 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 through Contran 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 "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 7 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 or a trial verdict 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:

- we have never settled any of the market share, 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 00 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 filed by or on behalf of states, counties, cities or their public housing authorities and school districts, or those asserted as class actions 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 one of these lead pigment cases, in April 2000 NL was 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 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 had expended or would 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 20 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 jurisdictions and seeks its abatement In July and August 20 3, the case was tried In January 20 4, the Judge issued a judgment finding NL, The Sherwin Williams Company and ConAgra Grocery Products Company jointly and severally liable for the abatement of lead paint in pre 980 homes, and ordered the defendants to pay an aggregate $ 5 billion to the people of the State of California to fund such abatement In February 20 4, we filed a motion for a new trial, and in March 20 4 the court denied the motion Subsequently in March 20 4, NL filed a notice of appeal with the Sixth District Court of Appeal for the State of California and the appeal is proceeding with the appellate court NL believes that this judgment is inconsistent with California law and is unsupported by the evidence, and we will defend vigorously against all claims

The Santa Clara case is unusual 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, (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 (iii) 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 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

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 978, and another consisting of individuals between the ages of six and twenty years who lived in Illinois housing built before 978 when they were between the ages of six months and six years and who had blood lead levels of 0 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 995 and February 2008 and who had incurred expenses associated with such screening In March 20 2, the trial court judge decertified the class In June 20 2, the trial court judge granted plaintiffs the right to appeal his decertification order, and in August 20 2 the appellate court granted plaintiffs permission to appeal In March 20 3, 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 20 3, plaintiffs moved to vacate the decertification In October 20 3, the judge denied plaintiffs' motion to vacate the decertification of the class In March 20 4, plaintiffs filed a new class certification motion In April 20 5, a class was certified consisting of parents or legal guardians of children who lived in certain "high risk" areas in Illinois between August 8, 995 and February 9, 2008, and incurred an expense or liability for having their children's blood lead levels tested

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 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

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, we are currently involved as a defendant, potentially responsible party ("PRP") or both, pursuant to 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 EPA's 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 (including costs associated with damages for personal injury or property damage and/or damages for injury to natural resources) 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 3 , 20 4 and 20 5, we have not recognized any material 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

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 NL's wholly owned environmental management subsidiary, NL Environmental Management Services, Inc , ("EMS"), has contractually assumed our obligations At December 3 , 20 5, NL had accrued approximately $ 3 million related to approximately 42 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 $ 66 million, including the amount currently accrued

We believe that it is not reasonably possible to estimate the range of costs for certain sites At December 3 , 20 5, 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, NL 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 936 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 20 0, NL reached its capped payment obligation under the cost sharing agreement with Doe Run In the fourth quarter of 20 3, Doe Run completed the remainder of the construction work A Removal Action Report and Post Removal Site Control plan is expected to be submitted to the EPA by Doe Run in 20 6

In June 2008, NL 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 970s 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 20 2, EPA notified NL of its potential liability at this site In May 20 3, EPA issued its Record of Decision for the site In June 20 3, 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: 3 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 20 4, 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 contribution from other PRPs

In September 2008, NL received a Special Notice letter from the EPA for liability associated with the Tar Creek Superfund site in Ottawa County, Oklahoma (Tar Creek) and a demand for related past and future costs NL responded with a good faith offer to pay certain of the EPA's past costs and to complete limited work in the areas in which NL operated In October 2008, NL received a claim from the State of Oklahoma for past, future and relocation costs in connection with the site In November 20 5, the United States Department of Justice lodged with the federal court a fully executed consent decree between the United States, the State of Oklahoma and NL that resolves the claims of the United States and the State of Oklahoma for past and future cleanup costs at Tar Creek The consent decree will become effective after it has been reviewed and officially approved by the federal court

In August 2009, NL was 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 04 7) 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 NL's 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 NL has denied liability and will defend vigorously against all claims

In June 20 , NL was served in *ASARCO LLC v. NL Industries, Inc., et al.* (United States District Court, Western District of Missouri, Case No 4: cv 00 38 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 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 NL has denied liability and will defend vigorously against all of the claims In the second quarter of 20 2, NL filed a motion to stay the case In the first quarter of 20 3, NL's motion was granted and the court entered an indefinite stay In the first quarter of 20 5, Asarco was granted permission to seek an interlocutory appeal of that stay order In March 20 5, the Eighth Circuit Court of Appeals denied Asarco's request for an interlocutory appeal of the stay order and the trial court's indefinite stay remains in place

In September 20 , NL was served in *ASARCO LLC v. NL Industries, Inc., et al.* (United States District Court, Eastern District of Missouri, Case No 4: 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 bankruptcy in relation to the Southeast Missouri Mining District In May 20 5, the trial court on its own motion entered an indefinite stay of the litigation In June 20 5, Asarco filed an appeal of the stay in the Eighth Circuit Court of Appeals NL has moved to dismiss that appeal as improperly filed In October 20 5, the Eighth Circuit Court of Appeals granted NL's motion to dismiss Asarco's appeal and the trial court's indefinite stay remains in place

In July 20 2, NL was served in *EPEC Polymers, Inc., v. NL Industries, Inc.*, (United States District Court for the District of New Jersey, Case 3: 2 cv 03842 PGS TJB) The plaintiff, a landowner of property located across the Raritan River from NL's 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 NL has denied liability and will defend vigorously against all of the claims

In March 20 3, NL received Special Notice from EPA for Operable Unit , 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 20 3, 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 In March 20 4, EPA issued a UAO to NL and approximately 27 other PRPs for performance of the Remedial Design at the site EPA contends that NL is liable as the alleged successor to the Doehler Die Casting Company, and therefore responsible for any potential contamination at the Site resulting from Doehler's ownership/operation of a warehouse and a die casting plant it owned 90 years ago NL believes that it has no liability at the Site NL is currently in discussions with EPA regarding a *de minimis* settlement and is otherwise taking actions necessary to respond to the UAO If these discussions are unsuccessful, NL will continue to deny liability and will defend vigorously against all of the claims

See also Item "Regulatory and Environmental Matters" and Note 7 to our Consolidated Financial Statements

Other We have also accrued approximately $7 4 million at December 3 , 20 5 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 7 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

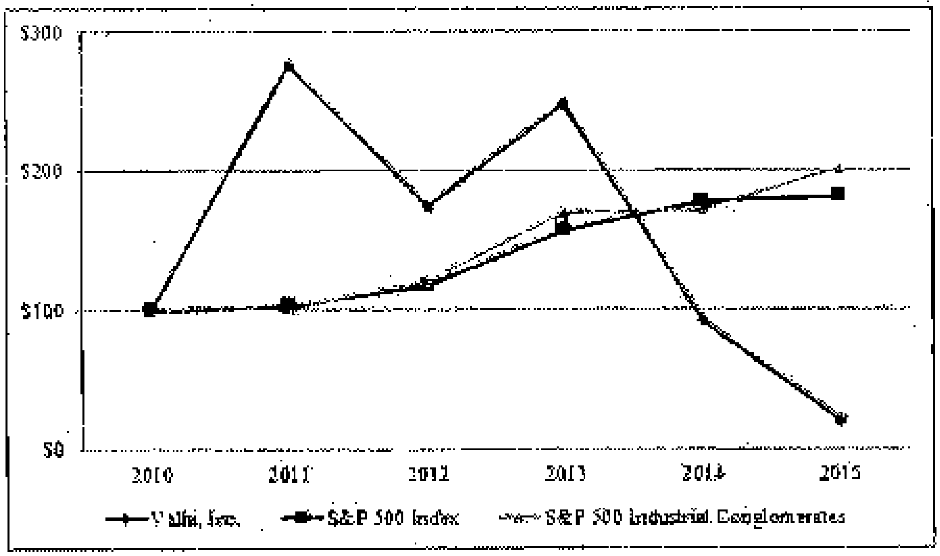
ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OR EQUITY SECURITIES

Common Stock and Dividends Our common stock is listed and traded on the New York Stock Exchange (symbol: VHI) As of March 4, 20 6, there were approximately 2,000 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 4, 20 6 the closing price of our common stock was $ 59

	High	Low	Cash dividends paid
Year ended December 31, 2014			
First Quarter	$ 6 40	$ 8 82	$ 05
Second Quarter	8 08	4 99	02
Third Quarter	7 95	6 53	02
Fourth Quarter	6 4	4 8	02
Year ended December 31, 2015			
First Quarter	$ 6 54	$ 5 3	$ 02
Second Quarter	7 0	5 66	02
Third Quarter	5 3	89	02
Fourth Quarter	2 8	2	02
First Quarter 2016 through March 6	$ 59	$ 93	$

We paid regular quarterly cash dividends of $ 05 per share the first quarter of 20 4 In May 20 4, after considering our results of operations, financial conditions, cash requirements for our businesses and our current expectations regarding reduced aggregate dividend distributions to be received from our subsidiaries, our Board of Directors reduced our regular quarterly dividend to $ 02 per share effective with the second quarter 20 4 dividend payment and such $ 02 cash dividend per share was paid in the second, third and fourth quarters of 20 4 and throughout 20 5 In February 20 6, our board of directors declared a first quarter 20 6 dividend of $ 02 per share to be paid on March 24, 20 6 to stockholders of record as of March 7, 20 6 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 or other 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 3 , 20 0 through December 3 , 20 5 The graph shows the value at December 3 of each year assuming an original investment of 00 at December 3 , 20 0, and assumes the reinvestment of our regular quarterly dividends in shares of our stock.



	December 31,					
	2010	2011	2012	2013	2014	2015
Valhi common stock	$ 00	$ 276	$ 74	$ 248	$ 92	$ 20
S&P 500 Composite Stock Price Index	00	02	8	57	78	8
S&P 500 Industrial Conglomerates Index	00	0	2	70	72	202

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 8 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 3 , 20 5, an aggregate of 66,500 shares were available for future award under this plan See Note 4 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 4 to our 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,				
	2011	2012	2013(1)	2014(1)	2015(1)
	(In millions, except per share data)				
STATEMENTS OF OPERATIONS DATA:					
Net sales:					
Chemicals	$,943 3	$,976 3	$,732 4	$,65 9	$ 1,348.8
Component products	79 8	83 2	92 0	03 9	109.0
Waste management	2 0	27 8	39 2	66 5	45.0
Real estate management and development(1)				40 3	30.1
Total net sales	$ 2,025	$ 2,087 3	$,863 6	$,862 6	$ 1,532.9
Operating income (loss):					
Chemicals	$ 553 0	$ 366 8	$ (25 4)	$ 56 8	$ 7.1
Component products	6 4	5 4	9 3	3 6	14.0
Waste management	(38 0)	(26 8)	(22 6)	(2 2)	(26.5)
Real estate management and development(1)				2 0	
Total operating income (loss)	$ 52 4	$ 345 4	$ (38 7)	$ 70 2	$ (5.4)
Net income (loss)	$ 295 0	$ 222	$ (26 9)	$ 79 5	$ (171.1)
Amounts attributable to Valhi stockholders:					
Income (loss) from continuing operations	$ 2 4 5	$ 4 4	$ (98 0)	$ 53 8	$ (133.6)
Income from discontinued operations(4)	3 0	8 4			
Net income(loss)	$ 2 7 5	$ 59 8	$ (98 0)	$ 53 8	$ (133.6)
DILUTED EARNINGS PER SHARE DATA:					
Net income (loss) attributable to Valhi stockholders:					
Income from continuing operations	$ 63	$ 4	$ (29)	$ 6	$ (39)
Income (loss) from discontinued operations(4)	0	06			
Net income (loss)	$ 64	$ 47	$ (29)	$ 6	$ (39)
Cash dividends	$ 58	$ 92	$ 20	$	$ .08
Weighted average common shares outstanding	342	342 0	342.0	342 0	342.0
STATEMENTS OF CASH FLOW DATA:					
Cash provided by (used in):					
Operating activities	$ 292 4	$ 7 9	$ 7	$ 67 3	$ 22.5
Investing activities	(220 9)	00 9	(56 2)	(55)	(57.0)
Financing activities	(299 8)	96 0	(286 2)	0 2	(10.6)
BALANCE SHEET DATA (at year end):					
Total assets (2)(3)	$ 2,8 4 8	$ 3, 5 5	$ 2,95 7	$ 2,945 2	$ 2,537.4
Long term debt (2)	7 6 2	878 8	74 7	9 9 7	951.0
Valhi stockholders' equity	657 2	733 6	60 3	477 6	268.7
Total equity	993 0	,09 7	992 8	8 3 9	526.9

( ) In December 20 3 we acquired a controlling interest in BMI, Inc and The LandWell Company and they are included in our Consolidated Balance Sheet beginning at December 3 , 20 3, and in our Consolidated Statement of Operations beginning January , 20 4 See Note 3 to our Consolidated Financial Statements

(2) Prior period amounts have been reclassified to reflect the change in the balance sheet classifications of unamortized debt issuance costs effective December 3 , 20 5 See Note 8 to our Consolidated Financial Statements As a result, deferred financing costs of $ 2 million at December 3 , 20 , $4 0 million at December 3 , 20 2, $ million at December 3 , 20 3 and $5 million at December 3 , 20 4, previously recognized as a noncurrent asset, are now classified as a direct deduction from the carrying value of its related debt liability

(3) Prior period amounts have been reclassified to reflect the change in the balance sheet classification of deferred income taxes effective December 3 , 20 5 See Note 8 to our Consolidated Financial Statements As a result, total assets decreased as compared to previously reported amounts by $22 0 million at December 3 , 20 , $ 5 0 million at December 3 , 20 2, $ 5 4 million at December 3 , 20 3 and $ 6 9 million at December 3 , 20 4

(4) In 20 2, CompX sold its furniture components operations for a gain, net of income taxes and noncontrolling interest, of $ 5 7 million, which is included in discontinued operations

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 , Waste Control Specialists LLC ("WCS"), Tremont LLC, Basic Management, Inc ("BMI") and the LandWell Company ("LandWell") Kronos (NYSE: KRO), NL (NYSE: NL) and CompX (NYSE MKT: CIX) each file periodic reports with the SEC

We have four 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
- *Component Products* We operate in the component products industry through our majority control of CompX CompX is a leading manufacturer of security products used in the recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries CompX is also a leading manufacturer of stainless steel exhaust systems, gauges, throttle controls and trim tabs for the recreational marine industry
- *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 20 2, and the Federal LLRW site commenced operations in 20 3 We reached an agreement to sell our Waste Management Segment in November 20 5 See Note 3 to our Consolidated Financial Statements
- *Real Estate Management and Development* We operate in real estate management and development through our majority control of BMI and LandWell BMI provides utility services to certain industrial and municipal customers and owns real property in Henderson, Nevada LandWell is engaged in efforts to develop certain land holdings for commercial, industrial and residential purposes in Henderson, Nevada In December 20 3, we acquired a controlling interest in each of these companies, and they are included in our results of operations and cash flows beginning on January , 20 4 See Note 3 to our Consolidated Financial Statements

Income (Loss) from Operations Overview

Year Ended December 31, 2014 Compared to Year Ended December 31, 2015

We reported a net loss attributable to Valhi stockholders of $ 33 6 million or $ 39 per diluted share in 20 5 compared to net income attributable to Valhi stockholders of $53 8 million or $ 6 per diluted share in 20 4

Our net income (loss) attributable to Valhi stockholders decreased from 20 4 to 20 5 primarily due to the net effects of:

- the recognition of an aggregate $ 59 0 million non cash deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations primarily in the second quarter of 20 5;
- lower operating income from our Chemicals Segment in 20 5 compared to 20 4, in part due to a charge associated with the implementation of certain workforce reductions primarily in the second quarter of 20 5;
- higher operating losses at our Waste Management segment in 20 5; and
- higher insurance recoveries in 20 4

Our diluted loss per share attributable to Valhi stockholders in 20 5 includes:

- the recognition of the non cash deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgian operations aggregating a charge of $ 27;

- a charge of $ 03 related to our Chemicals Segment's accrued workforce reduction costs; and
- income of $ 0 related to income from insurance recoveries

Our diluted earnings per share attributable to Valhi stockholders in 20 4 includes:

- an aggregate non cash income tax benefit of $ 0 (mostly in the second quarter) related to a net reduction in our reserve for uncertain tax positions; and
- insurance recoveries of $ 03

We discuss these amounts more fully below

Year Ended December 31, 2013 Compared to Year Ended December 31, 2014

We reported a net income attributable to Valhi stockholders of $53 8 million or $ 6 per diluted share in 20 4 compared to a net loss attributable to Valhi stockholders of $98 0 million or $ 29 per diluted share in 20 3

Our net income attributable to Valhi stockholders increased from 20 3 to 20 4 primarily due to the net effects of:

- operating income from our Chemicals Segment in 20 4 compared to an operating loss in 20 3;
- an aggregate non cash gain related to our purchase of a controlling interest in BMI and LandWell in December 20 3, 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 in 20 3;
- a loss on the prepayment of debt in 20 3;
- lower environmental remediation and related expenses in 20 4;
- higher insurance recoveries recognized in 20 4;
- a lower operating loss at our Waste Management segment in 20 4; and
- inclusion of operating income from our Real Estate Management and Development Segment beginning January , 20 4

Our diluted earnings per share attributable to Valhi stockholders in 20 4 includes:

- an aggregate non cash income tax benefit of $ 0 (mostly in the second quarter) related to a net reduction in our reserve for uncertain tax positions; and
- insurance recoveries of $ 03

Our diluted loss per share attributable to Valhi stockholders in 20 3 includes:

- a gain of $ 4 related to our purchase of a controlling interest in BMI and LandWell in December 20 3;
- insurance recoveries of $ 02;
- a charge of $ 0 related to the voluntary prepayments of the entire $390 million principal amount of Kronos' term loan; and
- a charge of $ 05 related to a litigation settlement of Kronos

We discuss these amounts more fully below

Current Forecast for 2016

We currently expect to report higher net income attributable to Valhi stockholders for 20 6 as compared to 20 5 primarily due to the net effects of:

- the 20 5 recognition of an aggregate $ 59 0 non cash deferred income tax asset valuation allowance related to the Chemicals Segment's German and Belgium operations
- operating income from our Chemicals Segment in 20 6 as compared to an operating loss in 20 5, in part due to anticipated costs savings as a result of its workforce reductions and other cost reduction initiatives;

- lower operating losses at WCS in 20 6 as we expect more revenue from the Compact and Federal LLRW disposal facilities during 20 6;
- lower operating income from our Component Products Segment as we anticipate lower security product sales due to the completion of a large contract during 20 5; and
- lower expected insurance recoveries received in 20 6 compared to 20 5

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 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 inputs as defined in Accounting Standards Codification ("ASC") 820 0 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 3 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 3 , 20 5, the carrying value (which equals their fair value) of substantially all of our marketable securities approximated 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 3 , 20 5 and its $250 million carrying value is equal to its cost basis

- *Goodwill* Our net goodwill totaled $379 7 million at December 3 , 20 5 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 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 Since 20 3, we have used the qualitative assessment of ASC 350 20 35 for our annual impairment test of our security products reporting unit and determined it was not necessary to perform the two step quantitative goodwill impairment test, as we concluded it is more likely than not that the fair value of the security products reporting unit exceeded its carrying amount

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 20 5 for each of our reporting units and concluded there was no impairment of the goodwill for those reporting units The 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 20 5 When we performed our annual goodwill impairment test in the third quarter of 20 5 for our Chemicals Segment goodwill we concluded there was no impairment of such goodwill However, future events and circumstances could change (i e a significant decline in quoted market prices) and result in a materially different finding which could result in the recognition of a material impairment with respect to such goodwill

- *Long lived assets* We assess our long lived assets, consisting principally of property, equipment, land held for development and capitalized operating permit costs for impairment only when circumstances as specified in ASC 360 0 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 3 , 20 5 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 2009 In January 20 0 WCS received a LLRW disposal permit Construction of the Compact and Federal LLRW sites began in January 20 The Compact LLRW site was fully certified and operational in April 20 2, and the Federal LLRW site was fully certified and operational in September 20 2 and commenced operations in the second quarter of 20 3 Revenues in 20 3 dropped significantly in the latter half of 20 3 and the first half of 20 4 as customers were unable to ship waste to WCS as a result of an industry wide shortage of approved shipping containers WCS ordered three shipping containers in 20 2 which were placed into service in 20 4 Shipping volumes increased significantly in the third and fourth quarters of 20 4 reflecting the industry wide easing of transportation issues and WCS had positive gross margins on an annual basis in 20 4 for the first time in its history Shipments were negatively impacted by availability of certain classifications of waste shipping containers to us during the latter part of the second quarter of 20 5 In July 20 5 we entered into an exclusive leasing arrangement to secure dedicated access to two such containers although fully implementing these containers into our shipping schedules has been slower than we anticipated In November 20 5 we secured the availability of certain shipping containers which had previously been unavailable to us Our impairment analysis is based on estimated future undiscounted cash flows of WCS' operations, and this analysis indicated no impairment was present at December 3 , 20 5 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 (approximately 75% or more) below our current expectations, it is reasonably likely we would conclude an impairment was present At December 3 , 20 5 the carrying value of WCS' total assets was $23 9 million In additional as noted in Note 3 to our Consolidated Financial Statements we reached an agreement to sell the entirety of our Waste Management Segment in November 20 5 for cash consideration of $270 million, $20 million face amount preferred stock and the assumption of all of WCS' third party indebtedness incurred prior to the date of the agreement and such third party consideration is in excess of our carrying amount of WCS' total assets at December 3 , 20 5

No other long lived assets in our other reporting units were tested for impairment during 20 5 because there were no circumstances indicating an impairment might exist

- *Intangible assets* Upon acquiring a controlling interest in our Real Estate Management and Development segment in December 20 3, we recognized an indefinite lived customer relations intangible asset of $5 million for long term contracts related to water delivery services to the City of Henderson, Nevada and various other users through a water system owned by BMI These contracts generally span many years and feature automatic renewing provisions The City of Henderson water delivery contract extended for a period of 25 years, and contained an automatic renewal provision In assessing the intangible asset for impairment, we first perform a qualitative analysis to determine whether it is more likely than not that the intangible asset has been impaired, using the guidance specified in ASC 305 30 35 If after assessing the totality of events and circumstances and their potential effect on significant inputs to the fair value determination, an entity determines that it is not more likely than not that the indefinite lived intangible asset is impaired, then the entity need not calculate the fair value of the intangible asset and perform the quantitative impairment test in accordance with paragraph 350 30 35 9 .Based on all relevant events and circumstances considered, we concluded it was not more likely than not that the intangible asset was impaired at December 3 , 20 5, and accordingly we were not required to perform a quantitative impairment analysis In January 20 6, the water delivery contract with the City of Henderson was amended As part of such amendment, the automatic renewal provision of the contract was eliminated, and the new contract runs through June 2040 The amendment to the City of Henderson water delivery contract represents an event or circumstance which would trigger the need to perform a quantitative impairment analysis with respect to the intangible asset However, this January 20 6 contract amendment represents a subsequent event which is not given accounting recognition at December 3 , 20 5 under ASC 855 0 25 3, as it does not relate to conditions that existed at December 3 , 20 5 Accordingly, the required quantitative impairment analysis will be completed in conjunction with our first quarter 20 6 close It is possible our impairment review may conclude that the value of the intangible asset is less than the carrying amount, in which case we would recognize an impairment charge in the first quarter of 20 6

- *Percentage completion revenue recognition* Certain real estate land sales by our Real Estate Management and Development segment (generally land sales associated with our residential/planned community) require us to complete property development and improvements after title passes to the buyer and we have received all or a substantial portion of the selling price To date, all of the land sales associated with the residential/planned community have been recognized under the percentage of completion method of accounting in accordance with ASC 970 605 30 Under such method, revenues and profits are recognized in the same proportion of our progress towards completion of our contractual obligations, with our progress measured by costs incurred as a percentage of total costs estimated to be incurred Such costs incurred and total estimated costs include amounts specifically identifiable with the parcels sold as well as certain development costs for the entire residential/planned community which are allocated to the parcels sold under applicable GAAP Estimates of total costs expected to be incurred require significant management judgment, and the amount of revenue and profits that have been recognized to date are subject to revisions throughout the development period The impact on the amount of revenue recognized resulting from any future change in the estimate of total costs estimated to be incurred would be accounted for prospectively in accordance with GAAP

- *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, expected 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 Deferred income tax assets and liabilities for each tax paying jurisdiction in which we operate are netted and presented as either a noncurrent deferred tax asset or liability, as applicable 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, at December 3 , 20 5 our Chemicals Segment has substantial net operating loss ("NOL") carryforwards in Germany (the equivalent of $683 million for German corporate purposes and $96 million for German trade tax purposes) and in Belgium (the equivalent of $86 million for Belgian corporate tax purposes), all of which have an indefinite carryforward period As a result, we have net deferred income tax assets with respect to these two jurisdictions, primarily related to these NOL carryforwards The German corporate tax is similar to the U S federal income tax, and the German trade tax is similar to the U S state income tax Prior to June 30, 20 5, and using all available evidence, we had concluded no deferred income tax asset valuation allowance was required to be recognized with respect to these net deferred income tax assets under the more likely than not recognition criteria, primarily because (i) the carryforwards have an indefinite carryforward period, (ii) we utilized a portion of such carryforwards during the most recent three year period, and (iii) we expected to utilize the remainder of the carryforwards over the long term We had also previously indicated that facts and circumstances could change, which might in the future result in the recognition of a valuation allowance against some or all of such deferred income tax assets However, as of June 30, 20 5, and given our operating results during the second quarter of 20 5 and our expectations at that time for our operating results for the remainder of 20 5, which as discussed elsewhere in this Annual Report have been driven in large part by the trend in our average TiO2 selling prices over such periods as well as the $2 million pre tax charge recognized in the second quarter of 20 5 in connection with the implementation of certain workforce reductions, we did not have sufficient positive evidence to overcome the significant negative evidence of having cumulative losses in the most recent twelve consecutive quarters in both our Chemicals Segment's German and Belgian jurisdictions at June 30, 20 5 (even considering that the carryforward period of our German and Belgian NOL carryforwards is indefinite, one piece of positive evidence) Accordingly, at June 30, 20 5, we concluded that we were required to recognize a non cash deferred income tax asset valuation allowance under the more likely than not recognition criteria with respect to our German and Belgian net deferred income tax assets Such valuation allowance aggregated $ 50 3 million at June 30, 20 5 We recognized an additional $8 7 million non cash deferred income tax asset valuation allowance under the more likely than not recognition criteria during the second half of 20 5, due to losses recognized by our German and Belgian operations during such period See Note 2 to our Consolidated Financial Statements

We record a reserve for uncertain tax positions where we believe it is more likely than not our tax positions will not prevail with the applicable tax authorities It is possible that in the future we may change our assessment regarding the probability that our tax positions will prevail that would require an adjustment to the amount of our reserve for uncertain tax positions that could either increase or decrease, as applicable, reported net income in the period the change in assessment was made

In addition, we evaluate at the end of each reporting period as to whether or not some or all of the undistributed earnings of our non U S subsidiaries are permanently reinvested (as that term is defined in GAAP) While we may have concluded in the past that some of such undistributed earnings are permanently reinvested, facts and circumstances can change in the future and it is possible that a change in facts and circumstances, such as a change in the expectation regarding the capital needs of our non U S subsidiaries, could result in a conclusion that some or all of such undistributed earnings are no longer permanently reinvested In such an event, we would be required to recognize a deferred income tax liability in an amount equal to the estimated incremental U S income tax and withholding tax liability that would be generated if all of 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 3 , 20 5 we have recorded total accrued environmental liabilities of $ 20 4 million

Operating income (loss) for each of our four 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, benefit 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
- Real Estate Management and Development impairment of long lived assets and revenue recognition under the percentage of completion method of accounting

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 2014 Compared to 2015 and 2013 Compared to 2014

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	
	2013	2014	2015	2013-14	2014-15
	(Dollars in millions)				
Net sales	$,732 9	$,65 9	$ 1,348.8	(5)%	(18)%
Cost of sales	,622 6	,304 6	1,158.5	(20)%	(11)%
Gross margin	$ 09 8	$ 347 3	$ 190.3	2 6 %	(45)%
Operating income (loss)	$ (25 4)	$ 56 8	$ 7.1	225 %	(95)%
Percent of net sales:					
Cost of sales	94%	79%	86%		
Gross margin	6%	2 %	4%		
Operating income (loss)	(7)%	9%	%		
TiO_2 operating statistics:					
Sales volumes*	498	496	525	%	6%
Production volumes*	474	5	528	8 %	3%
Production rate as percent of capacity	86%	92%	95%		
Percent change in TiO_2 net sales:					
TiO_2 product pricing				(6)%	(14)%
TiO_2 sales volumes					6
TiO_2 product mix				–	(2)
Changes in currency exchange rates					(8)
Total				(5)%	(18)%

* Thousands of metric tons

Industry conditions and 2015 overview Due to competitive pressures, our Chemicals Segment's average TiO_2 selling prices decreased throughout 20 4 and 20 5 Our Chemicals Segment's average selling prices at the end of 20 5 were 7% lower than at the end of 20 4, with lower prices in all major markets, most notably in North American and certain export markets Our Chemicals Segment's average selling prices in 20 5 were also impacted by a higher percentage of sales to lower priced export markets in 20 5 compared to 20 4 We experienced higher sales volumes in European and export markets in 20 5 as compared to 20 4, partially offset by lower volumes in North American markets in 20 5 as compared to 20 4

The following table shows our capacity utilization rates during 20 4 and 20 5

	2014	2015
First Quarter	90%	93%
Second Quarter	97%	100%
Third Quarter	96%	95%
Fourth Quarter	86%	92%
Overall	92%	95%

Our production capacity utilization rates in the first quarter of 20 4 were impacted by a union labor lockout at our Chemicals Segment's Canadian production facility that ended in December 20 3, as restart of production at the facility did not begin until February 20 4 Our production rates in the fourth quarter of 20 4 and the first and fourth quarters of 20 5 were impacted by the implementation of certain productivity enhancing improvement projects at certain facilities, as well as necessary improvements to ensure continued compliance with our permit regulations, which resulted in longer than normal maintenance shutdowns in some instances

We continued to experience moderation in the cost of TiO_2 feedstock ore procured from third parties in 20 4 and 20 5 Given the time lag between when third party feedstock ore is procured and when the TiO_2 product produced with such ore is sold and recognized in our cost of sales, our cost of sales per metric ton of TiO_2 sold declined throughout 20 4 and 20 5 Consequently, our cost of sales per metric ton of TiO_2 sold in 20 5 was slightly lower than our cost of sales per metric ton of TiO_2 sold in 20 4 (excluding the effect of changes in currency exchange rates)

In the second quarter of 20 5, our Chemicals Segment initiated a restructuring plan designed to improve our long term cost structure. A portion of such expected cost savings are planned to occur through workforce reductions During the second, third and fourth quarters of 20 5, we implemented certain voluntary and involuntary workforce reductions at certain of our facilities impacting approximately 60 individuals. We recognized an aggregate $2 7 million charge in 20 5 (substantially all of which was recognized in the second quarter) for such workforce reductions we had implemented through December 3 , 20 5, $ 0 8 million of which is classified as part of cost of sales and $ 0 9 million of which is classified in selling, general and administrative expense The charge associated with the workforce reductions implemented in the third and fourth quarters of 20 5, which impacted approximately 30 individuals, was not material due to the applicable law affecting such individuals, which generally provides for a short notice period (if any) and the payment of a nominal amount of severance (if any) See Note 9 to our Consolidated Financial Statements

Net Sales Our Chemicals Segment's net sales decreased 8% or $303 million in 20 5 compared to 20 4, primarily due to the net effect of a 4% decrease in average TiO_2 selling prices (which decreased net sales by approximately $23 million) and a 6% increase in sales volumes (which increased net sales by approximately $99 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 primarily due to higher sales in certain European and export markets, partially offset by lower sales in North American markets We estimate that changes in currency exchange rates decreased our net sales by approximately $ 38 million, or 8%, as compared to 20 4

Our Chemicals Segment's net sales decreased 5% or $80 5 million in 20 4 compared to 20 3, primarily due to a 6% decrease in average TiO_2 selling prices (which decreased net sales by approximately $ 04 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 remained relatively stable in 20 4 as compared to 20 3 as slightly higher sales in Europe were offset by lower sales in certain export markets In addition, we estimate the favorable effect of changes in currency exchange rates increased our net sales by approximately $ 2 million, or %, as compared to 20 3

Cost of Sales Our Chemicals Segment's cost of sales decreased $ 46 million or % in 20 5 compared to 20 4 due to the net impact of lower raw materials and other production costs of approximately $26 million (primarily caused by the lower third party feedstock ore costs, as discussed above), a 3% increase in TiO_2 production volumes and currency fluctuations (primarily the euro) In addition, cost of sales in 20 5 includes approximately $ 0 8 million of severance costs related to the workforce reduction plan discussed above

Our cost of sales as a percentage of net sales increased to 86% in 20 5 compared to 79% in 20 4, as the unfavorable impact of lower average selling prices and the workforce reduction charge more than offset the favorable effects of lower raw material costs and efficiencies related to higher production volumes, as discussed above

Our Chemicals Segment's cost of sales decreased $3 8 0 million or 20% in 20 4 compared to 20 3 due to the net impact of lower raw materials and other production costs of approximately $250 million (primarily caused by the lower third party feedstock ore costs, as discussed above), an 8% increase in TiO_2 production volumes and currency fluctuations (primarily the euro) Our cost of sales as a percentage of net sales improved to 79% in 20 4 compared to 94% in 20 3, primarily due to the net effects of lower raw material and other production costs and the lower average TiO_2 selling prices discussed above In addition, cost of sales in 20 3 includes approximately $ 9 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 5, 20 3 The Canadian facility represents approximately 9% 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 20 3, a new collective bargaining agreement was reached with CSN and production at the facility resumed in February 20 4 During the lockout we operated our Canadian plant at approximately 5% 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 $ 9 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

Gross Margin and Operating Income Our Chemicals Segment's operating income as a percentage of net sales decreased to % in 20 5 from 9% in 20 4 This decrease was driven by the decline in gross margin, which decreased to 4% in 20 5 compared to 2 % in 20 4, as well as the negative impact of the workforce reduction charge classified as part of other operating expense ($ 0 9 million) As discussed and quantified above, our gross margin decreased primarily due to the net effect of lower selling prices, workforce reduction costs classified as part of cost of sales ($ 0 8 million), lower manufacturing costs (primarily raw materials), higher production volumes, and higher sales volumes We estimate that changes in currency exchange rates increased operating income by approximately $40 million in 20 5 as compared to 20 4

Our Chemicals Segment's operating income increased significantly in 20 4, primarily due to the significant increase in our gross margin, which increased to 2 % in 20 4 compared to 6% in 20 3, and the 20 3 litigation settlement charge of $35 million, see Note 7 to our Consolidated Financial Statements As discussed and quantified above, our gross margin increased primarily due to the net effect of lower manufacturing costs (primarily raw materials), lower selling prices, higher production volumes and 20 3 costs associated with reaching a new Canadian collective bargaining agreement and related unabsorbed fixed costs charged directly to cost of sales Additionally, changes in currency exchange rates have positively affected our gross margin and operating income We estimate that changes in currency exchange rates increased operating income by approximately $42 million in 20 4 as compared to 20 3

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 6 million in each of 20 3 and 20 4 and $2 2 million in 20 5, 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 from non U S 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 non U S operations is denominated in the U S dollar (and consequently our non U S operations will generally hold U S dollars from time to time) Certain raw materials used worldwide, primarily titanium containing feedstocks, are purchased in U S dollars, while labor and other production and administrative costs are incurred primarily in local currencies Consequently, the translated U S dollar value of our non U S 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 non U S operations also generate currency transaction gains and losses which primarily relate to (i) the difference between the currency exchange rates in effect when non local currency sales or operating costs (primarily U S dollar denominated) are initially accrued and when such amounts are settled with the non local currency, (ii) changes in currency exchange rates during time periods when our non U S operations are holding non local currency (primarily U S dollars), and (iii) relative changes in the aggregate fair value of currency forward contracts held from time to time As discussed in Note 8 to our Consolidated Financial Statements, we periodically use currency forward contracts to manage a portion of our currency exchange risk, and relative changes in the aggregate fair value of any currency forward contracts we hold from time to time serves in part to mitigate the currency transaction gains or losses we would otherwise recognize from the first two items described above

Overall, we estimate that fluctuations in currency exchange rates had the following effects on the reported amounts of our sales and operating income (loss) for the periods indicated

Impact of changes in currency exchange rates—2015 vs. 2014

	Transaction gains/(losses) recognized			Translation gain/loss-impact of rate changes	Total currency impact 2015 vs. 2014
	2014	2015	Change		
			(in millions)		
Impact on:					
Net sales	$ —	$ —	$ —	$ (38)	$ (38)
Operating income	4	—	(4)	44	40

The $ 38 million reduction in net sales (translation loss) was caused primarily by a strengthening of the U S dollar relative to the euro, as our Chemicals Segment's euro denominated sales were translated into fewer U S dollars in 20 5 as compared to 20 4 The strengthening of the U S dollar relative to the Canadian dollar and the Norwegian krone in 20 5 did not have a significant effect on the reported amount of our net sales, as a substantial portion of the sales generated by our Chemicals Segment's Canadian and Norwegian operations are denominated in the U S dollar

The $40 million increase in operating income comprised the following net effects:

- A reduction in the amount of net currency transaction gains during the two periods of approximately $4 million Such net currency transaction gains (losses) result primarily from U S dollar denominated receivables and U S dollar currency held by our Chemicals Segment's non U S operations, which are translated into the applicable local currency at each balance sheet date During 20 4, a relative strengthening of the U S dollar relative to the euro and the Norwegian krone gave rise to a net $4 million currency transaction gain, whereas we recognized a nominal currency transaction loss during 20 5, and
- Approximately $44 million from net currency translation gains caused primarily by a strengthening of the U S dollar relative to the Canadian dollar and the Norwegian krone, as their local currency denominated operating costs were translated into fewer U S dollars in 20 5 as compared to 20 4 Overall, the strengthening of the U S dollar relative to the euro in 20 5 did not have a significant impact on our Chemicals Segment's operating income, as the reduction in net sales caused by such strengthening was substantially offset by the effect of our euro denominated operating costs being translated into fewer U S dollars

Impact of changes in currency exchange rates—2014 vs. 2013

	Transaction gains/(losses) recognized			Translation gain/loss-impact of rate changes	Total currency impact 2014 vs. 2013
	2013	2014	Change		
			(in millions)		
Impact on:					
Net sales	$ —	$ —	$ —	$ 2	$ 2
Operating income	(4)	4	8	34	42

The $ 2 million increase in net sales (translation gain) was caused primarily by a weakening of the U S dollar relative to the euro, as our euro denominated sales were translated into more U S dollars in 20 4 as compared to 20 3 The strengthening of the U S dollar relative to the Canadian dollar and the Norwegian krone in 20 4 did not have a significant effect on the reported amount of our Chemicals Segment's net sales, as a substantial portion of the sales generated by our Chemicals Segment's Canadian and Norwegian operations are denominated in the U S dollar

The $42 million increase in operating income comprised the following net effects:

- An increase in the amount of net currency transaction gains (losses) during the two periods of approximately $8 million Such net currency transaction gains (losses) result primarily from U S dollar denominated receivables and U S dollar currency held by our Chemicals Segment's non U S operations, which are translated into the applicable local currency at each balance sheet date During 20 3, a relative strengthening of the U S dollar relative to the Canadian dollar and the krone, partially offset by a relative weakening of the USD to the euro, gave rise to a net $4 million currency transaction loss, whereas we recognized a $4 million currency transaction gain during 20 4, and
- Approximately $34 million from net currency translation gains caused primarily by a strengthening of the U S dollar relative to the Canadian dollar and the Norwegian krone, as their local currency denominated operating costs were translated into fewer U S dollars in 20 4 as compared to 20 3, and the weakening of the U S dollar relative to the euro in 20 4 as their U S dollar denominated raw materials purchases resulted in a favorable currency impact relative to 20 3

Outlook During 20 5 we operated our Chemicals Segment's production facilities at 95% of practical capacity compared to 92% in 20 4 We expect our production volumes to be higher in 20 6 as compared to 20 5, as our production rates in 20 5 were impacted by the implementation of certain productivity enhancing improvement projects at certain facilities, as well as necessary improvements to ensure continued compliance with our permit regulations, which resulted in longer than normal maintenance shutdowns in some instances Assuming economic conditions do not deteriorate in the various regions of the world, we expect our sales volumes to be higher in 20 6 as compared to 20 5 We will continue to monitor current and anticipated near term customer demand levels and align our production and inventories accordingly

We continued to experience moderation in the cost of TiO_2 feedstock ore procured from third parties in 20 4 and 20 5 Given the time lag between when third party feedstock ore is procured and when the TiO_2 product produced with such ore is sold and recognized in our cost of sales, our cost of sales per metric ton of TiO_2 sold in 20 5 was slightly lower than our cost of sales per metric ton of TiO_2 sold in 20 4 (excluding the effect of changes in currency exchange rates) We expect our cost of sales per metric ton of TiO_2 sold in 20 6 will be lower than our per metric ton cost in 20 5, due in part to the favorable effect of the workforce reductions and other cost reduction initiatives we are undertaking as well as some modest improvement in the cost of feedstock ore

We started 20 5 with selling prices 9% lower than the beginning of 20 4, and prices declined by an additional 7% during 20 5 Industry data indicates that overall TiO_2 inventory held by producers has declined significantly during 20 5 In addition, we believe most customers hold very low inventories of TiO_2 with many operating on a just in time basis With the improvement in sales volumes experienced in 20 5, we continue to see evidence of strengthening demand for our TiO_2 products in certain of our primary markets We and our major competitors announced a price increase in late 20 5, which is expected to be implemented in the first quarter of 20 6, or as contracts allow The extent to which we will be able to achieve any price increases in the near term will depend on market conditions

Our Chemicals Segment initiated a restructuring plan in 20 5 designed to improve its long term cost structure A portion of such expected cost savings is planned to occur through workforce reductions During 20 5, our Chemicals Segment implemented certain voluntary and involuntary workforce reductions at certain of its facilities impacting approximately 60 individuals As of December 3 , 20 5 we have recognized an aggregate $2 7 million charge for such workforce reductions we had implemented through that date, $ 0 8 million of which is classified as part of cost of sales and $ 0 9 million of which is classified in selling, general and administrative expense The workforce reductions we have implemented through December 3 , 20 5 are not expected to negatively impact our ability to operate our production facilities at their practical capacity rates

In addition to the workforce reductions implemented through December 3 , 20 5, our Chemicals Segment is also in the process of implementing other cost reduction initiatives throughout the organization, including the implementation of continued process productivity improvements The workforce reductions we have implemented through December 3 , 20 5, combined with certain open positions that are not expected to be filled and cost savings expected to be realized from other cost reduction initiatives we are undertaking, are expected to result in a payback of the aggregate workforce reduction charge accrued at December 3 , 20 5 within approximately one year, the benefit of which we began to recognize in the second half of 20 5

Overall, we expect our Chemicals Segment's operating income in 20 6 will be higher as compared to 20 5 as a result of:

- the favorable effects of anticipated higher sales and production volumes in 20 5,
- the favorable effect of lower cost feedstock ore, and
- the expected cost savings from workforce reductions and other cost reduction initiatives throughout the organization

However, given, among other things, the level of our average selling prices at the beginning of 20 6, we believe it is possible we would report an operating loss in the first quarter of 20 6

Due to the constraints of high capital costs and extended lead time associated with adding significant new TiO2 production capacity, especially for premium grades of TiO2 products produced from the chloride process, we believe increased and sustained profit margins will be necessary to financially justify major expansions of TiO2 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 TiO2 pricing, some industry projects to increase TiO2 production capacity have been cancelled or deferred indefinitely, and announcements have been made regarding the closure of certain facilities Given the lead time required for production capacity expansions, a shortage of TiO2 products could occur if economic conditions improve and global demand levels for TiO2 increase sufficiently

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

	Years ended December 31,			% Change	
	2013	2014	2015	2013-14	2014-15
	(Dollars in millions)				
Net sales	$ 92 0	$ 03 9	$ 109.0	3%	5%
Cost of sales	64 5	7 6	75.6	%	6%
Gross margin	$ 27 5	$ 32 3	$ 33.4	7%	4%
Operating income	$ 9 3	$ 3 6	$ 14.0	46%	2%
Percent of net sales:					
Cost of sales	70%	69%	69%		
Gross margin	30%	3 %	31%		
Operating income	0%	3%	13%		

Net Sales Our Component Products Segment's net sales increased approximately $5 million in 20 5 principally due to higher demand within the security products reporting unit including $3 0 million related to existing government customers Sales within the marine component reporting unit increased 8% compared to prior year due to increased demand for products sold to the ski/wakeboard boat market, including the introduction of new product lines to that market Relative changes in selling prices did not have a material impact on net sales comparisons

Our Component Products Segment's net sales increased approximately $ 9 million in 20 4 principally due to higher demand within the security products reporting unit including $5 0 million related to a new initiative for an existing government customer, increased market penetration in electronic locks which increased $ 7 million in 20 4 and strong demand in transportation markets which increased $2 9 million in 20 4 Sales within the marine component reporting unit increased 7% compared to prior year and also contributed to the increase, reflecting greater penetration into non high performance marine markets 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 20 4 to 20 5 primarily due to increased sales volumes As a percentage of sales, cost of goods sold were flat primarily due to improved coverage of fixed manufacturing costs over increased production volumes to meet higher demand at each of our reporting units, partially offset by increased costs noted above

Our Component Products Segment's cost of sales and gross margin both increased from 20 3 to 20 4 primarily due to increased sales volumes As a percentage of sales, cost of goods sold decreased % primarily due to improved coverage of fixed manufacturing costs over increased production volumes to meet higher demand at each of our reporting units, partially offset by the impact of lower variable margins due to relative changes in customer and product mix within the security products reporting unit

Operating Income Our Component Products Segment operating income improved in 20 5 compared to 20 4 and also in 20 4 compared to 20 3 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 disposal of plant, property and equipment Operating costs and expenses increased in 20 5 primarily due to an increase of $ 5 million in 20 5 compared to 20 4 as a result of increased personnel costs Operating costs and expenses increased in 20 4 compared to 20 3 primarily as a result of increased administrative personnel costs and increased depreciation expense in the security products reporting unit partially offset by reduced corporate administrative personnel costs

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 48% of our Component Products Segment's cost of sales in 20 5, with commodity related raw materials accounting for approximately 0% of our cost of sales With the exception of a moderate midyear 20 4 increase in mined metals, including zinc, worldwide commodity raw material costs were mostly stable during 20 3 and 20 4 During 20 5, markets for our primary commodity related raw materials, including zinc, brass and stainless steel, have generally softened and are expected to remain soft well into 20 6 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 See Item "Business Component Products Segment CompX International, Inc Raw Materials"

Outlook The robust demand for our products experienced in 20 5 was supported by continued high demand from certain large existing customers, including those serving the government security applications and recreational transportation markets In addition, 20 5 sales included over $5 million in sales for a government security end user which is not expected to recur in 20 6 We also continue to experience the benefits of innovation and diversification in our product offerings to the recreational boat markets served by our marine components reporting unit We anticipate continued strong demand for our products in 20 6, though we do not expect demand for government security applications to approach 20 5 volumes As in prior periods, we will continue to monitor general economic conditions and sales order rates and respond to fluctuations in customer demand through continuous evaluation of staffing levels and consistent execution of our lean manufacturing and cost improvement initiatives 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

Waste Management

On November 8, 20 5, we entered into an agreement with Rockwell Holdco, Inc ("Rockwell"), for the sale of WCS to Rockwell for $270 million in cash, $20 million face amount in Series A Preferred Stock of Rockwell plus the assumption of all of WCS' third party indebtedness incurred prior to the date of the agreement Additionally, Rockwell and its affiliates will assume all financial assurance obligations related to the WCS business Rockwell is the parent company of Energy*Solutions*, Inc Completion of the sale is subject to certain customary closing conditions, including the receipt of U S anti trust approval, and is expected to close in the first half of 20 6, assuming all closing conditions are satisfied. There can be no assurance that any such sale of WCS would be completed

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Net sales	$ 39 2	$ 66 5	$ 45 0
Cost of sales	42 3	49 7	50 5
Gross margin	$ (3)	$ 6 8	$ (5 5)
Operating loss	$ (22 6)	$ (2 2)	$ (26 5)

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 20 The Compact LLRW site was fully certified and operational in April 20 2, and the Federal LLRW site was fully certified and operational in September 20 2 and received its first waste for disposal in the latter part of the second quarter of 20 3

Net Sales and Operating Loss The Waste Management Segment's net sales decreased $2 5 million in 20 5 compared to 20 4 Disposal volumes for the second, third and fourth quarters of 20 5 were negatively impacted by availability of certain classifications of waste shipping containers to us beginning during the latter part of the second quarter of 20 5 In July 20 5 we entered into an exclusive leasing arrangement to secure dedicated access to two such containers although fully implementing these containers into our shipping schedules has been slower than we anticipated In November 20 5 we signed an agreement which allowed us to resume utilizing the shipping containers which had been unavailable to us for much of the year In addition, we benefited from a one time disposal campaign related to the decommissioning of a nuclear power plant which contributed $ 9 million in disposal revenue in 20 4 and $4 8 million in 20 5 Lower disposal volumes in 20 5 led to lower coverage of fixed costs as compared to 20 4 As a result, our Waste Management Segment's operating loss increased significantly in 20 5 as compared to 20 4

The Waste Management Segment's net sales increased in 20 4 compared to 20 3 due to increased disposal volumes in the third quarter and fourth quarters of 20 4 Disposal volumes for these quarters were favorably impacted by the industry wide availability of disposal shipping containers. While disposal volumes were higher in 20 4 as compared to 20 3, the average per unit disposal price was lower in 20 4 due to relative changes in the mix of waste disposed Strong results in the third and fourth quarters of 20 4 allowed for greater coverage of fixed costs as compared to prior periods As a result, our Waste Management Segment had operating income in the third and fourth quarters of 20 4 and a lower operating loss for the full year 20 4 compared to the full year of 20 3

We recognized an operating loss in all years 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 have not consistently received sufficient volumes of LLRW for disposal in both our Compact and Federal LLRW disposal facilities to overcome our fixed operating cost structure However, as noted above, our operating results in the second half of 20 4 were profitable and demonstrate that with consistent disposal activity we can minimize operating losses We continue to seek to increase our Waste Management Segment's sales volumes from waste streams permitted under our current licenses

Outlook With both of the Compact LLRW disposal facility and the Federal LLRW disposal facility certified and operational, we now provide "one stop shopping" for treatment, storage and disposal of hazardous, toxic, 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 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 We were awarded a national disposal contract for our Federal LLRW disposal facility in April 20 3 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 dollar value waste streams We have regularly received waste for disposal since the end of the second quarter of 20 3 for the Federal LLRW disposal facility, but it may be difficult for us to generate positive operating results until we begin routinely receiving larger Federal LLRW streams for disposal In addition, we are dependent to a certain extent on large commercial projects in order to receive sufficient disposal volumes to operate at full capacity Most large projects, both federal and commercial, are subject to a competitive bidding and delays in the expected time line for waste disposal to be completed While we are the only commercial facility licensed to take Class A, B and C LLRW and Mixed LLRW (LLRW mixed with hazardous waste) other facilities can accept Class A waste including facilities that in some circumstances mix waste in such a way that some Class B waste may meet the Class A disposal requirements at these facilities

With the receipt of our recent license amendments and our dedicated shipping containers now in service, including containers we leased in July 20 5, we believe we are positioned to take full advantage of our disposal facilities going forward We recognized an operating loss in 20 5 primarily due to delayed disposal shipments including shipments from generator sites which were adversely impacted by the severe winter weather which limited the ability of some generators to ship waste during the first quarter and the availability of certain classifications of waste shipping containers beginning in latter part of the second quarter through November of 20 5

We believe our Waste Management Segment can become a viable, profitable operation; however, we do not know if we will be successful in improving cash flows We have in the past, and we may in the future, consider strategic alternatives with respect to our Waste Management Segment We could report a loss in any such strategic transaction; however we expect to recognize a gain if the pending transaction noted about is successfully closed

Real Estate Management and Development

	Years ended December 31,	
	2014	2015
	(In millions)	
Net sales	$ 40.3	$ 30.1
Cost of sales	33.9	25.4
Gross margin	6.4	$ 4.7
Operating income	$ 2.0	$

General We obtained a controlling interest in our Real Estate Management and Development Segment in December 20 3 Prior to December 20 3, we owned a 32% interest in BMI, which among other things provides utility services to an industrial park located in Henderson, Nevada 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 Prior to December 20 3, we also had a 2% interest in LandWell, which is actively engaged in efforts to develop certain real estate in Henderson, Nevada including approximately 2, 00 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use at December 3 , 20 3 BMI owns an additional 50% interest in LandWell In December 20 3 we completed the acquisition of an additional 3 % ownership interest in BMI and an additional 5% ownership interest in LandWell We completed this acquisition 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, including the 50% ownership interest held by BMI

Over the years, LandWell and BMI have focused on developing and selling the land transferred to LandWell as part of its formation in the early 950's as well as additional land holdings acquired by LandWell in the surrounding area subsequent to LandWell's formation (although BMI and LandWell have not had significant real property acquisitions since 2004) Since LandWell's formation, LandWell and BMI have a history of successfully developing and selling over ,200 acres of retail, light industrial, commercial and residential projects in the Henderson, Nevada area However, a substantial portion of such projects, had been completed prior to the 2008 economic downturn which was particularly acute in the Las Vegas area real estate market which includes Henderson Following such economic downturn, LandWell's land sales were substantially reduced as compared to prior years, and LandWell did not recognize any material amount of land sales in the 2008 to 20 3 time period During this time period, LandWell has been primarily focusing on the development of a large tract of land in Henderson zoned for residential/planned community purposes (approximately 2, 00 acres) Planning and zoning work on such project began in 2007, but LandWell delayed significant development efforts until economic conditions had improved As general economic conditions improved in 20 and 20 2, LandWell began intensive development efforts of the residential/planned community in 20 3 (with BMI acting as the general contractor for all such development efforts) At the time of our December 20 3 acquisition of the additional ownership interests in BMI and LandWell, LandWell owned such 2, 00 acres as well as approximately 400 acres zoned for commercial and light industrial purposes

In December 20 3 and through the end 20 5, LandWell has closed or entered into escrow on approximately 4 0 acres of the residential/planned community and certain other acreage at contracted prices that support the estimated fair value assigned to the land held for development that was acquired with consideration of development costs expected to be incurred after the acquisition date See Note 3 to our Consolidated Financial Statements Contracts for land sales are negotiated on an individual basis and sales terms and prices will vary based on such factors as location (including location within a planned community), expected development work, and individual buyer needs Although land may be under contract, we do not recognize revenue until we have satisfied the criteria for revenue recognition set forth in ASC Topic 976 In some instances, we will receive cash proceeds at the time the contract closes and record deferred revenue for some or all of the cash amount received, with such deferred revenue being recognized in subsequent periods Because land held for development was initially recognized at estimated fair value at the acquisition date as required by ASC Topic 805, we do not expect to recognize significant operating income on land sales for the land currently under contract We expect the development work to continue for 0 to 5 years on the rest of the land held for development, especially the remainder of the residential/planned community

Prior to gaining control of BMI and LandWell in December 20 3, we accounted for our existing ownership interest in BMI and LandWell by the equity method of accounting, as discussed in Notes 3 and 7 to our Consolidated Financial Statements As noted above, following the 2008 economic downturn LandWell's land sales were substantially reduced as compared to prior years, and LandWell did not recognize any material land sales in the 2008 to 20 3 time period Consequently, we did not recognize any material amounts of equity in earnings of BMI and LandWell during such time periods However, we do not believe that LandWell's operating results during such time period are indicative of LandWell's expected future operating results or the fair value of LandWell's assets at the time of our December 20 3 acquisition, given that LandWell had not recognized any material land sales in recent years, the significant development work that had been undertaken in 20 3, the revenue that was expected to be recognized with respect to the land sales that have closed or entered into escrow (as noted above), and an expectation that LandWell will continue its development efforts for the rest of its land held for development, especially the remainder of the residential/planned community

Net Sales and Operating Income A substantial portion of the net sales from our Real Estate Management and Development segment in 20 5 consisted of revenues from land sales We recognized $2 5 million in revenues on land sales during 20 5 compared to $3 9 million in 20 4 As noted above we recognize revenue in our residential/planned community under percentage completion accounting and a large majority of the revenue we recognized in 20 4 and 20 5 was under this method of revenue recognition We also have commercial property not included in the planned community for which revenue is generally recognized in full at closing, as we generally have no further obligations after the closing date of the sale for these properties Almost half of our land sales revenue in 20 5 were for such property sales not included in the planned community The contracts on these sales (both within the planned community and otherwise) include approximately 270 acres of the residential planned community and certain other acreage which closed in December 20 3 and through the end of 20 5 Cost of sales related to land sales revenues was $ 9 9 million in 20 5 and $28 million in 20 4 The remainder of net sales and cost of sales related to this segment primarily relates to water delivery fees and expenses We deliver water to several customers under long term contracts; sales and cost of sales related to water delivery are expected to be relatively consistent from period to period As noted above, because land held for development was initially recognized at estimated fair value at the acquisition date as required by ASC Topic 805, we did not recognize significant operating income in either 20 4 or 20 5

Outlook Having obtained a controlling interest in BMI and LandWell in December 20 3, we are actively pursuing opportunities to maximize cash proceeds from the sale of our land held for development In the near term, we are focused on developing and selling land we manage, primarily to residential builders, for the approximately 2, 00 acres zoned for residential/planned community in Henderson, Nevada We expect the development work for the residential/planned community to continue over the next several years, including those parcels currently under contract for which the development work is expected to be completed in 20 7 As noted above, we do not expect to recognize significant amounts of operating income related to these sales for the parcels currently under contract; however, we do expect to generate cash proceeds from these sales in excess of our acquisition costs, which proceeds are expected to be used, in part, to fund ongoing development work for the remainder of these properties

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 20 3, 20 4 and 20 5 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 20 3, 20 4 and 20 5

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 $ 0 4 million in the insurance recoveries we recognized in 20 4 relate to a settlement NL reached with one of its insurance carriers in September 20 4 in which it agreed to reimburse NL for a portion of its past 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 20 3 and 20 5 relate to reimbursement of ongoing litigation defense costs See Note 7 to our Consolidated Financial Statements

Other General Corporate 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 20 3, 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

Corporate expenses were 2% higher at $39 6 million in 20 5 compared to $38 8 million in 20 4 Corporate expenses increased primarily due to higher administrative related expenses in 20 5, offset in part by lower environmental remediation and related costs and to a lesser extent lower litigation and related costs in 20 4 Included in corporate expense are:

- litigation and related costs at NL of $4 8 million in 20 5 compared to $7 0 million in 20 4; and
- environmental remediation and related costs of $5 7 million in 20 5 compared to $6 6 million in 20 4

Corporate expenses were 63% lower at $38 8 million in 20 4 compared to $ 05 3 million in 20 3 Corporate expenses decreased primarily due to lower environmental remediation and related costs and to a lesser extent lower in litigation and related costs in 20 3 Included in corporate expense are:

- litigation and related costs at NL of $7 0 million in 20 4 compared to $ 0 2 million in 20 3; and
- environmental remediation and related costs of $6 6 million in 20 4 compared to $69 0 million in 20 3

Overall, we currently expect that our net general corporate expenses in 20 6 will be lower than in 20 5 primarily due to lower expected environmental remediation and related costs and lower litigation 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 7 to our Consolidated Financial Statements If our current expectations regarding the number of cases in which we expect to be involved during 20 6, 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 20 6, 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 7 to our Consolidated Financial Statements

Loss on Prepayment of Debt and Interest Expense Interest expense increased to $59 0 million in 20 5 from $56 7 million in 20 3 primarily due to the net effects of higher 20 5 average debt levels and mostly offset by lower average interest rates on outstanding borrowings (principally Kronos' term loan amended in May 20 5)

Interest expense increased slightly to $56 7 million in 20 4 from $56 million in 20 3 primarily due to the net effects of higher 20 4 average debt levels of our Chemicals Segment as a result of the transactions noted above and the addition of debt related to the acquisition of EMI and LandWell, offset by lower average interest rates on outstanding borrowings (principally Kronos' new term loan issued in February 20 4)

In 20 3, 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 related to the voluntary prepayment of Kronos' prior term loan by $290 million in the first quarter of 20 3 and the remaining $ 00 million in the third quarter of 20 3 See Note 9 to our Consolidated Financial Statements

We expect interest expense will be slightly higher in 20 6 as compared to 20 5 due to higher average balances of outstanding borrowings at Valhi and higher average interest rates as a result of the increase in the prime rate on variable rate debt and the Kronos interest rate swap See Note 9 to our Consolidated Financial Statements

Provision for Income Taxes (Benefit) We recognized income tax expense of $97 3 million in 20 5 compared to income tax expense of $32 5 million in 20 4 As discussed above in "Critical Accounting Policies and Estimates" subsection, our income tax expense in 20 5 includes an aggregate non cash deferred income tax expense of $ 59 0 million related to the recognition of a deferred income tax asset valuation allowance for our German and Belgian operations (mostly recognized in the second quarter) We continue to believe we will ultimately realize the full benefit of our German and Belgian NOL carryforwards, in part because of their indefinite carryforward period However, our ability to reverse all or a portion of such valuation allowance in the future is dependent on the presence of sufficient positive evidence, such as the existence of cumulative profits in the most recent twelve consecutive quarters, and the ability to demonstrate future profitability for a sustainable period Until such time as we are able to reverse the valuation allowance in full, to the extent we generate additional losses in Germany or Belgium in the intervening periods, our effective income tax rate would be impacted by the existence of such valuation allowance, because such losses would effectively be recognized without any associated net income tax benefit, as such losses would result in a further increase in the deferred income tax asset valuation allowance Alternatively, until such time as we are able to reverse the valuation allowance in full, to the extent we generate income in Germany or Belgium in the intervening periods, our effective income tax rate would also be impacted by the existence of such valuation allowance, because such income would effectively be recognized without any associated net income tax expense, as we would reverse a portion of the valuation allowance to offset the income tax expense attributable to such income In addition, any change in tax law related to the indefinite carryforward period of these NOLs could adversely impact our ability to reverse the valuation allowance in full Consistent with our expectation regarding our consolidated results of operations in 20 6 (as discussed above in the "Chemicals Outlook" subsection), we currently believe it is likely Kronos' German and Belgian operations will report improved operating results in 20 6 as compared to 20 5 However, we currently do not expect that our German and Belgian operating results would improve to such an extent in 20 6 that reversal of the valuation allowance in full would be supported by the presence of sufficient positive evidence

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 such recognition of deferred income taxes is not available to us There is a maximum amount (or cap) of such deferred income taxes we are required to recognize with respect to our direct investment in Kronos, and we previously reached such maximum amount in the fourth quarter of 20 0 Since that time and through March 3 , 20 5, we were not required to recognize any additional deferred income taxes with respect to our direct investment in Kronos because the deferred income taxes associated with the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock continued to be above such cap However, at June 30, 20 5, the deferred income taxes associated with the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock was, for the first time since the fourth quarter of 20 0, below such cap, in large part due to the net loss reported by Kronos in the second quarter of 20 5 Accordingly, our provision for income taxes in 20 5 includes an aggregate non cash income tax benefit of $29 3 million for the reduction in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock, to the extent such reduction related to our equity in Kronos' net loss A substantial portion of such $29 3 million was recognized in the second quarter of 20 5, with the remainder recognized in the third and fourth quarters Such amount is included in the table of our income tax rate reconciliation for incremental net benefit on earnings and losses on non U S and U S subsidiaries in Note 2 to our Consolidated Financial Statements (in addition to the other items indicated above) A portion of such reduction also related to our equity in Kronos' other comprehensive income (loss) items, and the amounts shown in the table above for income tax expense (benefit) allocated to other comprehensive income (loss) includes amounts related to our equity in Kronos' other comprehensive income (loss) items

Our income tax expense was favorably impacted by an aggregate non cash income tax benefit of $3 7 million in 20 4 (mostly in the second quarter) related to a net reduction in our reserve for uncertain tax positions

As discussed above, our income tax expense in 20 5 includes a non cash deferred income tax expense of $ 59 0 million related to the recognition of a deferred income tax asset valuation allowance for our German and Belgian operations, and a non cash deferred income tax benefit of $29 3 million associated with the reduction in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock Generally, we expect the effective tax rate associated with our non U S earnings to be lower than our U S statutory tax rate of 35% Excluding the impact of the net reduction our reserve for uncertain tax positions in 20 4, our effective tax rate in such period was lower than the U S federal statutory tax rate of 35% primarily due to our non U S earnings Our effective tax rate in 20 5, excluding the impact of the deferred income tax asset valuation allowance and the deferred income tax benefit associated with our direct investment in Kronos we recognized, was higher than the U S federal statutory tax rate of 35%, primarily due to a current U S income tax benefit attributable to current year losses of one of our Chemical Segment's non U S subsidiaries

We recognized income tax expense of $32 5 million in 20 4 and an income tax benefit of $9 0 million in 20 3 This difference is primarily due to fluctuations in our earnings See Note 2 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 benefit in 20 3 includes an aggregate $ million benefit related to the re measurement 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 20 3 See Notes 3 and 2 to our Consolidated Financial Statements See Note 2 to our Consolidated Financial Statements for a tabular reconciliation of our statutory tax expense to our actual tax expense, and a summation of some of the more significant items impacting this reconciliation

Noncontrolling Interest in Net Income (Loss) of Subsidiaries Noncontrolling interest in operations of subsidiaries decreased from 20 5 to 20 4 primarily due to decreased operating income at Kronos Noncontrolling interest in continuing operations of subsidiaries increased from 20 4 to 20 3 primarily due to increased operating income at Kronos and the addition of noncontrolling interest in BMI and LandWell during 20 4

Related Party Transactions We are a party to certain transactions with related parties See Note 6 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 to our Consolidated Financial Statements

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 $36 2 million in 20 3, $22 0 million in 20 4, and $23 7 million in 20 5 Included in our 20 3 defined benefit plan expense is a curtailment charge of $7 3 million resulting from amendments to one of our 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 and salaried workers was closed to new participants in December 20 3 and 20 4, respectively, and existing hourly and salaried plan participants will no longer accrue additional defined pension benefits after December 20 3 and 20 4, respectively Our U S plan for both NL and Kronos was closed to new participants in 996, 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 $28 4 million in 20 3, $2 7 million in 20 4, and $ 8 0 million in 20 5

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 3 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 3 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 3 , 20 5, approximately 63%, 5%, 8% and 0% of the projected benefit obligations related to our plans in Germany, Canada, Norway and the US, respectively We use several different discount rate assumptions in determining our consolidated defined benefit pension plan obligation and expense This is because we maintain defined benefit pension plans in several different countries in Europe and North America 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, 2013 and expense in 2014	Obligations at December 31, 2014 and expense in 2015	Obligations at December 31, 2015 and expense in 2016
Kronos and NL Plans:			
Germany	3 5%	2 3%	2 3%
Canada	4 7%	3 8%	3 9%
Norway	4 0%	2 3%	2 8%
US	4 5%	3 8%	4 %

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 3 , 20 5, the fair value of plan assets for all defined benefit plans comprised $47 6 million related to US plans and $382 5 million related to foreign plans Substantially all of plan assets attributable to foreign plans related to plans maintained by Kronos, and approximately 7 % and 29% of the plan assets attributable to US plans related to plans maintained by NL and Kronos, respectively At December 3 , 20 5, approximately 58%, 24%, 2% and 4% of the plan assets of Kronos' plans were in Germany, Canada, Norway and the US, 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 Substantially all of the assets of our US plan 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 sponsored by Contran and certain of its affiliates, including us Such assumed asset mixes are discussed in Note to our Consolidated Financial Statements

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

	December 31, 2015			
	Germany	Canada	Norway	CMRT
Equity securities and limited partnerships	20%	36%	2%	56%
Fixed income securities	70	56	62	38
Real estate	9		9	
Other		8	7	6
Total	00%	00%	00%	00%

	December 31, 2014			
	Germany	Canada	Norway	CMRT
Equity securities and limited partnerships	9%	43%	3%	60%
Fixed income securities	67	47	60	32
Real estate			8	
Other	3	0	9	8
Total	00%	00%	00%	00%

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 while maintaining an acceptable level of risk.

The assumed long term rates of return on plan assets used for purposes of determining net period pension cost for 20 3, 20 4 and 20 5 were as follows:

	2013	2014	2015
Kronos and NL plans:			
Germany	4.8%	4.3%	4.3%
Canada	5.8%	5.5%	5.8%
Norway	4.8%	3.8%	3.8%
US	0.0%	7.5%	7.5%

We currently expect to use the same long term rate of return on plan asset assumptions in 20 6 as we used in 20 5 for purposes of determining the 20 6 defined benefit pension plan expense.

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 upon average long term inflation rates for the applicable country.

In addition to the actuarial assumptions discussed above, the amount of recognized defined benefit pension expense and the amount of net pension asset and net pension liability will vary based upon relative changes in currency exchange rates.

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 of any cumulative unrecognized actuarial losses, while any actuarial losses generated in future periods would reduce the favorable amortization effect of any cumulative unrecognized actuarial gains.

During 20 5, our defined benefit pension plans generated a combined net actuarial gain of $ 3 million This actuarial gain resulted primarily from the increase in discount rates from December 3 , 20 4 to December 3 , 20 5, partially offset by an actual return on plan assets during 20 5 below the expected return

Based on the actuarial assumptions described above and our current expectations for what actual average currency exchange rates will be during 20 6, we currently expect our aggregate defined benefit pension expense will approximate $22 million in 20 6 In comparison, we currently expect to be required to make approximately $ 6 million of aggregate contributions to such plans during 20 6

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 our plans as of December 3 , 20 5, our aggregate projected benefit obligations would have increased by approximately $29 million at that date, and our aggregate defined benefit pension expense would be expected to increase by approximately $2 million during 20 5 Similarly, if we lowered the assumed long term rates of return on plan assets by 25 basis points for all of our plans, our defined benefit pension expense would be expected to increase by approximately $ million during 20 5

OPEB Plans We provide certain health care and life insurance benefits for certain of our eligible retired employees See Note to our Consolidated Financial Statements At December 3 , 20 5, approximately 54%, 25% and 2 % 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

Based on such actuarial assumptions and our current expectation for what actual average currency exchange rates will be during 20 6, we expect our consolidated OPEB benefit will approximate $ million in 20 6 because our OPEB plans have no plan assets we will be required to make the entire benefit as of contributions to such plans during 20 6

We believe that all of the actuarial assumptions used are reasonable and appropriate However, if we had lowered the assumed discount rate by 25 basis points for all plans as of December 3 , 20 5, our aggregate projected benefit obligations at that date and our OPEB cost during 20 5 would increase by approximately $ 3 million Similarly, a one percent assumed change in health care trend rates for all plans would not materially impact our OPEB costs

Foreign Operations

We have substantial operations located outside the United States, principally our Chemicals Segment's 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 At December 3 , 20 5, we had substantial net assets denominated in the euro, Canadian dollar and Norwegian krone

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 decreased from $67 3 million in 20 4 to $22 5 million in 20 5 This $44 8 million decrease in cash provided by operations was primarily due to the net effects of the following items:

- consolidated operating loss of $5 4 million in 20 5, a decline of $ 75 6 million compared to operating income of $ 70 2 million in 20 4;
- lower net cash paid for income taxes in 20 5 of $23 2 million resulting from our decreased profitability;
- lower net distributions received from our TiO2 joint venture in 20 5 of $4 million, primarily due to the timing of the joint venture's working capital needs;

- lower cash funding of pension plans in 20 5 of $3 7 million; and
- changes in receivables, inventories, payables and accrued liabilities in 20 5 provided $2 3 million in net cash compared to net cash used of $ 6 9 million in 20 4, an increase in the amount of cash provided of $ 39 2 million compared to 20 4, primarily due to the relative changes in our inventories, receivables, prepaids, land held for development, payables and accruals

Cash flows from operating activities decreased from $ 7 million in 20 3 to $67 3 million in 20 4 This $49 8 million decrease in cash provided by operations was primarily due to the net effects of the following items:

- consolidated operating income of $ 70 2 million in 20 4, a $308 9 million improvement compared to an operating loss of $ 38 7 million in 20 3;
- higher net cash paid for income taxes in 20 4 of $ 7 8 million resulting from our increased profitability;
- lower cash funding of pension plans in 20 4 of $6 7 million; and
- changes in receivables, inventories, payables and accrued liabilities in 20 4 used $ 6 9 million of net cash in 20 4, a decrease in the amount of cash provided of $4 0 5 million compared to 20 3, primarily due to the relative changes in our inventories, receivables, prepaids, land held for development, payables and accruals, primarily due to a significant amount of cash provided by relative changes in our inventories in 20 3 resulting principally from lower inventory costs in our Chemicals Segment

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

- Kronos' average days sales outstanding ("DSO") increased from December 3 , 20 4 to December 3 , 20 5 due to higher sales volume in 20 5, partially offset by the effect of lower sales prices in the fourth quarter of 20 5 as compared to the fourth quarter of 20 4
- Kronos' average days sales in inventory ("DSI") increased from December 3 , 20 4 to December 3 , 20 5 due to higher inventory volumes offset by lower inventory raw material costs
- CompX's average DSO decreased slightly from December 3 , 20 4 to December 3 , 20 5 as a result of the timing of sales and collections in the last month of 20 5 as compared to 20 4
- CompX's average DSI decreased from December 3 , 20 4 to December 3 , 20 5 to more normal levels following the intentional fourth quarter inventory build at the end of 20 4, in anticipation of elevated sales in early 20 5

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

	December 31, 2013	December 31, 2014	December 31, 2015
Kronos:			
Days sales outstanding	62 days	6 days	66 days
Days sales in inventory	75 days	76 days	80 days
CompX:			
Days sales outstanding	35 days	32 days	31 days
Days sales in inventory	76 days	90 days	76 days

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 00% 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,		
	2013	2014	2015
		(In millions)	
Cash provided by (used in) operating activities:			
Kronos	$ 30	$ 87 6	$ 52.0
Valhi exclusive of subsidiaries	60 8	5 3	12.3
CompX	(4)	2 2	13.5
NL exclusive of subsidiaries	9	2 0	15.6
Waste Control Specialists	(7 6)	7 9	(12.2)
Tremont	(3)	3 7	(.6)
BMI		5 9	(1.7)
LandWell		(3)	4.8
Other	(6)	(6)	
Eliminations	(79)	(75 6)	(61.2)
Total	$ 7	$ 67 3	$ 22.5

Investing Activities

We disclose capital expenditures by our business segments in Note 2 to our Consolidated Financial Statements All of our capitalized permit costs relate to our Waste Management Segment

During 20 5 we had net proceeds of $ 4 million from the disposal of marketable securities and we had net restricted cash payments of $2 9 million, see Note 7 to our Consolidated Financial Statements

During 20 4 we had net purchases of $ 2 million of marketable securities and we received a net $ 8 6 million from the release of restricted cash, see Notes 2 and 7 to our Consolidated Financial Statements

We had the following investing activities during 20 3:

- we paid $5 3 million in cash (plus we issued a promissory note and a deferred payment obligation) to purchase additional interests in BMI and LandWell in December 20 3 These businesses had $27 4 million in cash and cash equivalents at the December 3 , 20 3 acquisition date, see Note 3 to our Consolidated Financial Statements
- we collected $3 0 million in principal payments on a note receivable;
- we received $ 6 million in net proceeds on the sale of an asset held for sale;
- we made required payments of $ 4 million to certain collateral trusts for WCS; and
- we received net proceeds from the sales and purchases of all other marketable securities of $3 2 million in market transactions

Financing Activities

During 20 3, we:

- borrowed a net $40 million on Valhi's credit facility with Contran; and
- repaid $ 3 million under Tremont's promissory note payable

During 20 4, we:

- borrowed $348 3 million under Kronos' new term loan and subsequently repaid $2 6 million;
- repaid $ 70 0 million under Kronos' note payable to Contran;
- borrowed $8 0 million under Kronos' North American credit facility and subsequently repaid $92 million;

- borrowed a net $ 7 2 million on Valhi's credit facility with Contran;
- repaid $ 7 million under Tremont's promissory note payable;
- borrowed $ million from a Canadian economic development agency and
- repaid $ 9 million under BMI's bank note payable

During 20 3, we:

- voluntarily prepaid $390 0 million principal amount of Kronos' term loan;
- borrowed $ 90 0 million under Kronos' new note payable to Contran, and subsequently repaid $20 0 million;
- borrowed $ 62 million and subsequently repaid $ 5 0 million under Kronos' North American credit facility;
- borrowed € 0 million ($ 2 8 million when borrowed) on Kronos' European credit facility and subsequently repaid €20 million ($26 5 million when repaid);
- borrowed $ 7 million from a Canadian economic development agency;
- prepaid $ 8 5 million remaining principal amount under CompX's promissory note payable to Timet Finance Management Company, a subsidiary of TIMET (a company formerly affiliated with us);
- 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

We paid aggregate cash dividends on our common stock of $67 9 million in 20 3, $37 3 million in 20 4 and $27 million in 20 5 ($ 05 per share in the first quarter of 20 4, and $ 02 per share for the second, third and fourth quarters of 20 4 and each quarter of 20 5) Distributions to noncontrolling interest in 20 3, 20 4 and 20 5 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

Other cash flows from financing activities in 20 3, 20 4 and 20 5 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 3 , 20 5, our consolidated indebtedness was comprised of:

- Valhi's $250 million loan from Snake River Sugar Company due in 2027;
- Valhi's $263 8 million outstanding on its $325 million credit facility with Contran which is due no earlier than December 3 , 20 7;
- $343 9 million aggregate borrowing under Kronos' term loan ($33 0 million carrying amount, net of unamortized original issue discount and debt issuance costs) due through February 2020;
- WCS' financing capital lease with Andrews County, Texas ($65 6 million outstanding) which has an effective interest rate of 7 0% and is due in monthly installments through August 2035;
- Tremont's promissory note payable ($ 7 million outstanding) due in December 2023;
- $9 4 million on BMI's bank note payable ($9 3 million carrying amount, net of debt issuance costs), due through January 2025;
- $3 million on LandWell's note payable to the City of Henderson due in October 2020; and
- approximately $ 3 6 million of other indebtedness, primarily capital lease obligations

Certain of our credit facilities require the respective borrowers to maintain a number of covenants and restrictions which, among other things, restrict our 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 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 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 its 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, and one of such requirements is based on the ratio of net debt to the last twelve months EBITDA of the borrowers The terms of all of our debt instruments (including revolving lines of credit for which we have no outstanding borrowings at December 3 , 20 5) are discussed in Note 9 to our Consolidated Financial Statements We are in compliance with all of our debt covenants at December 3 , 20 5 We believe that we will be able to continue to comply with the financial covenants contained in our credit facilities through their maturity

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 any time 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 3 , 20 6) and long term obligations (defined as the five year period ending December 3 , 2020) 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 3 , 20 5, we had credit available under existing facilities of $ 54 8 million, which was comprised of:

- $25 3 (1) million under Kronos' European revolving credit facility;
- $68 3 million under Kronos' North American revolving credit facility; and
- $6 2 (2) million under Valhi's Contran credit facility

( ) Based on the terms of Kronos' European credit facility (including the net debt to EBITDA financial test discussed above), and the borrowers' EBITDA over the last twelve months ending December 3 , 20 5, Kronos' borrowing availability at December 3 , 20 5 under this facility is approximately 9% of the credit facility, or €23 million

(2) Amounts available under this facility are at the sole discretion of Contran

At December 3 , 20 5, we had an aggregate of $235 9 million of restricted and unrestricted cash, cash equivalents and marketable securities A detail by entity is presented in the table below

	Total amount	Held outside U.S.
	(In millions)	
Kronos	$ 94.3	$ 78.1
CompX	52.3	
NL exclusive of its subsidiaries	48.6	.2
WCS	16.8	
BMI	5.7	
Tremont exclusive of its subsidiaries	8.8	
LandWell	9.0	
Valhi exclusive of its subsidiaries	.4	
Total cash and cash equivalents, restricted cash and marketable securities	$ 235.9	$ 78.3

Capital Expenditures and other Investments

We currently expect our aggregate capital expenditures for 20 6 will be approximately $96 million as follows:

- $63 million by our Chemicals Segment, including approximately $9 million in the area of environmental compliance, protection and improvement;
- $ 9 million by our Waste Management Segment;
- $4 million by our Component Products Segment; and
- $ 0 million by our Real Estate Management and Development Segment

The WCS amount includes approximately $2 million in capitalized operating permit costs In addition LandWell expects to spend approximately $ 2 million on land development costs during 20 6 (which are included in the determination of cash provided by operating activities)

Capital spending for 20 6 is expected to be funded primarily through cash generated from operations and borrowing under existing credit facilities Planned capital expenditures in 20 6 at Kronos and CompX will primarily be to maintain and improve the cost effectiveness of our facilities A significant portion of Kronos' planned capital expenditures in 20 6 relates to the implementation of a new accounting and manufacturing system. 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 3 , 20 5 we had approximately 4 0 million shares available for repurchase of our common stock under the authorizations described in Note 4 to our Consolidated Financial Statements

Prior to 20 3, 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 20 3 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 3 , 20 5 approximately 95 million shares are available for repurchase

Prior to 20 3, 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 20 3, 20 4 and 20 5, and at December 3 , 20 5 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 $ 5 per share in each quarter of 20 6, based on the 58 0 million shares we held of Kronos common stock at December 3 , 20 5, we would receive aggregate annual regular dividends from Kronos of $34 8 million During 20 3 NL paid a quarterly cash dividend of $ 25 per share We received aggregate annual dividends from NL of $20 2 million in 20 3 based on the 40 4 million shares we held of NL common stock during those periods In February 20 4 NL's Board of Director's deferred consideration of NL's first quarter dividend, and no dividend was paid by NL in the first quarter of 20 4 In May 20 4, NL's Board of Directors suspended NL's cash dividend We did not receive any dividends from NL during 20 4 or 20 5 and we do not know if we will receive any cash dividends from NL during 20 6 We did not receive any distributions from WCS during 20 5, and we do not expect to receive any distributions from WCS during 20 6 We expect that our newest consolidated subsidiaries, BMI and LandWell, which we acquired a controlling interest in during December 20 3, will pay cash dividends, but the timing and amount of such dividends are uncertain In this regard, we received aggregate dividends from BMI and LandWell of $7 0 million in the first quarter of 20 4, and we received aggregate dividends from BMI and LandWell of $ 5 million in February 20 5 and $ 9 million in December 20 5 We do not know if we will receive additional distributions from BMI and LandWell during 20 6 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 paid by CompX 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 what we believe is the long term 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 WCS has borrowed substantial amounts from us over the years Prior to 20 5, we contributed these amounts to WCS' capital WCS had borrowed an aggregate $33 million from our subsidiary in 20 3 which we contributed to WCS's capital WCS did not borrow any amounts from us during 20 4 During 20 5, WCS borrowed an aggregate $ 9 0 million from our subsidiary, and WCS could borrow an additional $4 0 million under its current intercompany facility with such subsidiary at December 3 , 20 5 It is probable WCS will borrow additional amounts from our subsidiary during 20 6 under the terms of the revolving credit facility

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 20 5 under this facility, which as amended is due on demand, but in any event no earlier than March 3 , 20 7 and no later than December 3 , 20 7 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 $ 00 million We also eliminate any such intercompany borrowings in our Consolidated Financial Statements We had no borrowings from Kronos during 20 5 under this facility, which as amended is due on demand, but in any event no earlier than December 3 , 20 7 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 20 6, we expect distributions received from the LLC in 20 6 will exceed our debt service requirements under our $250 million loans from Snake River Sugar Company by approximately $ 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 7 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 7 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 7 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 7 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 3 , 20 5 by the type and date of payment

Contractual commitment	Payment due date 2016	2017/ 2018	2019/ 2020	2021 and after	Total
			(In millions)		
Indebtedness ( ):					
Principal	$ 4 7	$ 289 0	$ 354	$ 366 5	$,024 3
Interest payments	58 8	04 4	76 4	77 6	4 72
Operating leases (2)	4	3 3	8 0	23 6	56 3
Kronos' long term supply contracts for the purchase of TiO_2 feedstock (3)	340 5	456 4	68 0		864 9
Kronos' long term service and other supply contracts (4)	50 4	7	5 7	9 5	46 7
CompX's raw material and other purchase commitments (5)	9 8				9 9
WCS collateral trust (6)	6 9	3 8	3 8	43	82 6
Fixed asset acquisitions (2)	25 3	2 7			28 0
BMI and LandWell purchase commitments (7)					
Deferred payment obligation (8)					
Estimated income tax obligations (9)	5 7				5 7
Total	$ 524 6	$ 950 8	$ 536 0	$ 636 4	$ 2,647 8

( ) The amount shown for indebtedness involving revolving credit facilities is based upon the actual amount outstanding at December 3 , 20 5, and the amount shown for interest for any outstanding variable rate indebtedness is based upon the December 3 , 20 5 interest rate, reflects the net impact of the associated interest rate swap and assumes that such variable rate indebtedness remains outstanding until the maturity of the facility The timing and amount shown for principal payments on term loan indebtedness is based on the mandatory contractual principal repayment schedule of such indebtedness, and assumes no voluntary principal prepayments 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 we are 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 or semi annually 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 half 20 6 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 7 to our Consolidated Financial Statements and above in "Business Chemicals Segment Kronos Worldwide, Inc raw materials" The amounts shown in the table above include the feedstock ore requirements from contracts we entered into through February 20 6

(4) The amounts shown for the long term service and other supply contracts primarily pertain to agreements we have entered into with various providers of products or services which help to run our plant facilities (electricity, natural gas, etc), utilizing December 3 , 20 5 exchange rates See Note 7 to our Consolidated Financial Statements

(5) 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

(6) The funding requirements for WCS collateral trust agreements are described in Note 7 to our Consolidated Financial Statements

(7) 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

(8) The deferred payment obligation is described in Note 3 to our Consolidated Financial Statements

(9) The amount shown for income taxes is the amount of our consolidated income taxes currently payable at December 3 , 20 5, which is assumed to be paid during 20 6 and includes taxes payable, if any, to Contran as a result of our being a member of the Contran Tax Group See Notes and 6 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 TiO2 produced by the joint venture in the future, and the joint venture's future cost of producing such TiO2 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 TiO2 for us See Notes 7 and 7 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 to our Consolidated Financial Statements We currently expect we will be required to contribute an aggregate of $ 6 9 million to our defined benefit pension and OPEB plans during 20 6
- 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 2 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

See Note 20 to our Consolidated Financial Statements

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 3 , 20 5 our aggregate indebtedness was split between 36% of fixed rate instruments and 64% of variable rate borrowings (in 20 4 the percentages were 38% of fixed rate instruments and 62% 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 3 , 20 5

The table below shows the fair value of our financial liabilities at December 3 , 20 5

	Indebtedness* Amount					Year end interest rate	Maturity date
	Carrying value		Fair value				
	(In millions)						
Fixed rate indebtedness:							
Valhi loans from Snake River	$	250.0	$	250.0		9.4%	2027
Tremont promissory note payable		17.1		17.1		3.0	2023
WCS financing capital lease		65.6		65.6		7.0	2035
Note payable to the City of Henderson		3.1		3.1		3.0	2020
Total fixed rate indebtedness		335.8		335.8		8.5%	
Variable rate indebtedness:							
Kronos term loan	$	338.0	$	309.5		4.0%	2020
Valhi Contran credit facility		263.8		263.8		4.5	2017
BMI bank note payable		9.3		9.3		3.5	2025
Total variable rate indebtedness		611.1		582.6		4.2%	
Total	$	946.9	$	918.4		5.8%	

* Excludes capital lease obligations

As part of our interest rate risk management strategy, in 20 5 we entered into a pay fixed/receive variable interest rate swap contract to minimize our exposure to volatility in the benchmark LIBOR interest rate as it relates to our forecasted outstanding variable rate indebtedness As a result of this swap the amount of interest expense we will incur is fixed at the swap rate, consequently a change in LIBOR rate will not impact the amount of interest expense recognized Considering the effects of the interest rate swap approximately 72% of our debt would be considered fixed rate and our weighted average borrowing rate for such indebtedness would be 6 % See Note 8 to our Consolidated Financial Statements for a discussion of this interest rate swap

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 US dollar relative to the euro, the Canadian dollar and, the Norwegian krone

Certain of our sales generated by our non US operations are denominated in US 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 8 to our Consolidated Financial Statements for a discussion of certain currency forward contracts to which we are a party at December 3 , 20 5

See Notes and 8 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 3 , 20 4 and 20 5

Raw Materials Our Chemicals Segment generally enters into long term supply agreements for certain critical raw materials 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 commodity related raw material costs We do not have long term supply agreements for 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 , Level 2 and Level 3 inputs) at December 3 , 20 4 and 20 5 was $256 8 million and $258 3 million, respectively The potential change in the aggregate fair value of these investments, assuming a hypothetical 0% change in prices, would be approximately $25 7 million at December 3 , 20 4 and $25 8 million at December 3 , 20 5

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)

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

None

ITEM 9A. CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures which, as defined in Exchange Act Rule 3a 5(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 934, 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 and Chief Executive Officer, and Bobby D O'Brien, our Director, President and Chief Financial Officer, have evaluated the design and effectiveness of our disclosure controls and procedures as of December 3 , 20 5 Based upon their evaluation, these executive officers have concluded that our disclosure controls and procedures were effective as of the date of such evaluation

Management s report on internal control over financial reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting which, as defined by Exchange Act Rule 3a 5(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 the 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 generally accepted accounting principles, and includes those policies and procedures that:

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

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 20 3 (commonly referred to as the "20 3 COSO" framework) Based on our evaluation under that framework, we have concluded that our internal control over financial reporting was effective as of December 3 , 20 5

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 3 , 20 5, as stated in their report, which is included in this Annual Report on Form 0 K

As permitted by the SEC, our assessment of internal control over financial reporting excludes (i) internal control over financial reporting of equity method investees and (ii) internal control over the preparation of any financial statement schedules which would be required by Article 2 of Regulation S X However, our assessment of internal control over financial reporting with respect to equity method investees did include controls over the recording of amounts related to our investment that are recorded in the 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 3 , 20 5 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting

Certifications

Our chief executive officer is required to annually file a certification with the New York Stock Exchange, or NYSE, certifying our compliance with the corporate governance listing standards of the NYSE During 20 5, our chief executive officer filed such annual certification with the NYSE The 20 5 certification was unqualified

Our chief executive officer and chief financial officer are also required to, among other things, file quarterly certifications with the SEC regarding the quality of our public disclosures, as required by Section 302 of the Sarbanes Oxley Act of 2002 The certifications for the quarter ended December 3 , 20 5 have been filed as Exhibits 3 , and 3 2 to this Annual Report on Form 0 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 20 6 definitive proxy statement we will file with the SEC pursuant to Regulation 4A within 20 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 20 6 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 20 6 proxy statement

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTORS INDEPENDENCE

The information required by this Item is incorporated by reference to our 20 6 proxy statement See also Note 6 to our Consolidated Financial Statements

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item is incorporated by reference to our 20 6 proxy statement

PART IV

ITEM 15. EXHIBITS

(a) and (c) Financial Statements

The Registrant

Our Consolidated Financial Statements listed on the accompanying Index of Financial Statements (see page F) 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 700, Dallas, Texas 75240 Pursuant to Item 60 (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 0% of our consolidated total assets as of December 3 , 20 5

I em No	Exh b Index
3	Restated Certificate of Incorporation of Valhi, Inc incorporated by reference to Exhibit 3 to our Current Report on Form 8 K (File No 5467) dated May 0, 20 2 and filed on May 0, 20 2
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 0 2 to our Current Report on Form 8 K/A (File No 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 of our Current Report on Form 8 K (File No 5467) dated November 6, 2007
0	Intercorporate Services Agreement between Valhi, Inc and Contran Corporation effective as of January , 2004 incorporated by reference to Exhibit 0 to our Quarterly Report on Form 0 Q for the quarter ended March 3 , 2004
0 2	Intercorporate Services Agreement between Contran Corporation and NL Industries, Inc effective as of January , 2004 incorporated by reference to Exhibit 0 to NL's Quarterly Report on Form 0 Q (File No 640) for the quarter ended March 3 , 2004
0 3	Intercorporate Services Agreement between Contran Corporation and CompX International Inc effective January , 2004 incorporated by reference to Exhibit 0 2 to CompX's Annual Report on Form 0 K (File No 3905) for the year ended December 3 , 2003
0 4	Intercorporate Services Agreement between Contran Corporation and Kronos Worldwide, Inc effective January , 2004 incorporated by reference to Exhibit No 0 to Kronos' Quarterly Report on Form 0 Q (File No 3 763) for the quarter ended March 3 , 2004
0 5**	Tax Agreement between Valhi, Inc and Contran Corporation dated June 3, 20 5
0 6*	Valhi, Inc 20 2 Director Stock Plan incorporated by reference to Exhibit 4 5 of the Registration statement on Form S 8 of the Registrant (File No 333 4839) Filed on May 3 , 20 2
0 7*	Kronos Worldwide, Inc 20 2 Director Stock Plan incorporated by reference to Exhibit 4 4 of the Registration statement on Form S 8 of the Registrant (File No 333 3425) Filed on May 3 , 20 2
0 8*	CompX International Inc 20 2 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 3 , 20 2
0 9*	NL Industries, Inc 20 2 Director Stock Plan incorporated by reference to Exhibit 4 4 of the Registrant's statement on Form S 8 (File No 00 00640) Filed on May 3 , 20 2
0 0	First Amended and Restated Agreement Regarding Shared Insurance among CompX International Inc , Contran Corporation, Keystone Consolidated Industries, Inc , Kronos Worldwide, Inc , NL Industries, Inc and Valhi, Inc dated October 5, 20 5 incorporated by reference to Exhibit 0 24 to the Annual Report on Form 0 K of Kronos Worldwide, Inc (File No 00 3 763) for the year ended December 3 , 20 3
0	Formation Agreement of The Amalgamated Sugar Company LLC dated January 3, 997 (to be effective December 3 , 996) between Snake River Sugar Company and The Amalgamated Sugar Company incorporated by reference to Exhibit 0 9 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 996
0 2	Master Agreement Regarding Amendments to The Amalgamated Sugar Company Documents dated October 9, 2000 incorporated by reference to Exhibit 0 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 3	Prepayment and Termination Agreement dated October 4, 2005 among Valhi, Inc , Snake River Sugar Company and Wells Fargo Bank Northwest, N A incorporated by reference to Exhibit No 0 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 4	Company Agreement of The Amalgamated Sugar Company LLC dated January 3, 997 (to be effective December 3 , 996) incorporated by reference to Exhibit 0 20 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 996
0 5	First Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated May 4, 997 incorporated by reference to Exhibit 0 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997

I em No	Exh b Index
0 6	Second Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated November 30, 998 incorporated by reference to Exhibit 0 24 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 998
0 7	Third Amendment to the Company Agreement of The Amalgamated Sugar Company LLC dated October 9, 2000 incorporated by reference to Exhibit 0 2 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 8	Amended and Restated Company Agreement of The Amalgamated Sugar Company LLC dated October 4, 2005 among The Amalgamated Sugar Company LLC, Snake River Sugar Company and The Amalgamated Collateral Trust incorporated by reference to Exhibit No 0 7 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 9	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, 997 incorporated by reference to Exhibit 0 2 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 996
0 20	Limited Recourse Promissory Note in the principal amount of $2 2 5 million between Valhi, Inc and Snake River Sugar Company, and the related Limited Recourse Pledge Agreement, both dated January 3, 997 incorporated by reference to Exhibit 0 22 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 996
0 2	Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc , as amended and restated effective May 4, 997 incorporated by reference to Exhibit 0 9 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 22	Second Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc dated November 30, 998 incorporated by reference to Exhibit 0 28 to Valhi, Inc 's Annual Report on Form 0 K (File No 5467) for the year ended December 3 , 998
0 23	Third Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc dated October 9, 2000 incorporated by reference to Exhibit 0 3 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 24	Fourth Amendment to the Subordinated Loan Agreement between Snake River Sugar Company and Valhi, Inc dated March 3 , 2003 incorporated by reference to Exhibit No 0 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended March 3 , 2003
0 25	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 9, 2000 incorporated by reference to Exhibit 0 4 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 26	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 9, 2000 incorporated by reference to Exhibit 0 5 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 27	Contingent Subordinate Collateral Agency and Paying Agency Agreement among Valhi, Inc , Snake River Sugar Company and First Security Bank National Association dated October 9, 2000 incorporated by reference to Exhibit 0 6 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 28	Deposit Trust Agreement related to the Amalgamated Collateral Trust among ASC Holdings, Inc and Wilmington Trust Company dated May 4, 997 incorporated by reference to Exhibit 0 2 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 29	First Amendment to Deposit Trust Agreement dated October 4, 2005 among ASC Holdings, Inc and Wilmington Trust Company incorporated by reference to Exhibit No 0 2 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 30	Pledge Agreement between The Amalgamated Collateral Trust and Snake River Sugar Company dated May 4, 997 incorporated by reference to Exhibit 0 3 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997

I em No	Exh b Index
0 3	Second Pledge Amendment (SPT) dated October 4, 2005 among The Amalgamated Collateral Trust and Snake River Sugar Company incorporated by reference to Exhibit No 0 4 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 32	Guarantee by The Amalgamated Collateral Trust in favor of Snake River Sugar Company dated May 4, 997 incorporated by reference to Exhibit 0 4 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 33	Second SPT Guaranty Amendment dated October 4, 2005 among The Amalgamated Collateral Trust and Snake River Sugar Company incorporated by reference to Exhibit No 0 5 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 34	Voting Rights and Collateral Deposit Agreement among Snake River Sugar Company, Valhi, Inc , and First Security Bank, National Association dated May 4, 997 incorporated by reference to Exhibit 0 8 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 35	Subordination Agreement between Valhi, Inc and Snake River Sugar Company dated May 4, 997 incorporated by reference to Exhibit 0 0 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 36	First Amendment to the Subordination Agreement between Valhi, Inc and Snake River Sugar Company dated October 9, 2000 incorporated by reference to Exhibit 0 7 to Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 37	Form of Option Agreement among Snake River Sugar Company, Valhi, Inc and the holders of Snake River Sugar Company's 0 9% Senior Notes Due 2009 dated May 4, 997 incorporated by reference to Exhibit 0 to the Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended June 30, 997
0 38	Option Agreement dated October 4, 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 0 6 to Valhi, Inc 's Amendment No to its Current Report on Form 8 K (File No 5467) dated October 8, 2005
0 39	First Amendment to Option Agreements among Snake River Sugar Company, Valhi Inc , and the holders of Snake River's 0 9% Senior Notes Due 2009 dated October 9, 2000 incorporated by reference to Exhibit 0 8 to the Valhi, Inc 's Quarterly Report on Form 0 Q (File No 5467) for the quarter ended September 30, 2000
0 40	Formation Agreement dated as of October 8, 993 among Tioxide Americas Inc , Kronos Louisiana, Inc and Louisiana Pigment Company, L P incorporated by reference to Exhibit 0 2 of NL's Quarterly Report on Form 0 Q (File No 640) for the quarter ended September 30, 993
0 4	Joint Venture Agreement dated as of October 8, 993 between Tioxide Americas Inc and Kronos Louisiana, Inc incorporated by reference to Exhibit 0 3 of NL's Quarterly Report on Form 0 Q (File No 640) for the quarter ended September 30, 993
0 42	Kronos Offtake Agreement dated as of October 8, 993 by and between Kronos Louisiana, Inc and Louisiana Pigment Company, L P incorporated by reference to Exhibit 0 4 of NL's Quarterly Report on Form 0 Q (File No 640) for the quarter ended September 30, 993
0 43	Amendment No to Kronos Offtake Agreement dated as of December 20, 995 between Kronos Louisiana, Inc and Louisiana Pigment Company, L P incorporated by reference to Exhibit 0 22 of NL's Annual Report on Form 0 K (File No 640) for the year ended December 3 995
0 44	Allocation Agreement dated as of October 8, 993 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 0 0 to NL's Quarterly Report on Form 0 Q (File No 640) for the quarter ended September 30, 993
0 45	Lease Contract dated June 2 , 952, between Farbenfabriken Bayer Aktiengesellschaft and Titangesellschaft mit beschränkter Haftung (German language version and English translation thereof) incorporated by reference to Exhibit 0 4 of NL's Annual Report on Form 0 K (File No 640) for the year ended December 3 , 985
0 46	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 0 to Tremont Corporation's Quarterly Report on Form 0 Q (File No 0 26) for the quarter ended June 30, 2002

I em No	Exh b Index
0 47	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 , 20 6 incorporated by reference to Exhibit 0 26 to the Annual Report on Form 0 K of Kronos Worldwide, Inc (File No 00 3 763) for the year ended December 3 , 20 5
0 48	Credit Agreement, dated February 8, 20 4, by and among Kronos Worldwide, Inc and Deutsche Bank AG New York Branch incorporated by reference to Exhibit 0 of the Current Report on Form 8 K and filed by Kronos Worldwide, Inc (File No 00 3 763) dated February 8, 20 4 and filed by the registrant on February 8, 20 4
0 49	First Amendment to Credit Agreement dated May 2 , 20 5 among Kronos Worldwide, Inc , Deutsche Bank AG New York Branch, as Administrative Agent, and the lenders a party thereto incorporated by reference to Exhibit 0 to the current report on Form 8 K and filed by Kronos Worldwide, Inc (File No 00 3 763) dated May 2 , 20 5 and filed by the registrant on May 2 , 20 5
0 50	Guaranty and Security Agreement, dated February 8, 20 4, 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 0 2 to the Current Report on Form 8 K (File No 00 3 763) dated February 8, 20 4 and filed by and filed by Kronos Worldwide, Inc on February 8, 20 4
0 5	Intercreditor Agreement dated as of February 8, 20 4, 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 0 3 to the Current Report on Form 8 K (File No 00 3 763) dated February 8, 20 4 and filed by and filed by Kronos Worldwide, Inc on February 8, 20 4
0 52	Purchase Agreement by and between Rockwell Holdco, Inc and Andrews County Holding, Inc incorporated by reference to Exhibit No 2 to Valhi, Inc 's Current Report on Form 8 K (File No 333 4839) dated November 9, 20 5
2 **	Subsidiaries of Valhi, Inc
23 **	Consent of PricewaterhouseCoopers LLP with respect to Valhi's Consolidated Financial Statements
3 **	Certification
3 2**	Certification
32 **	Certification
0 INS **	XBRL Instance Document
0 SCH **	XBRL Taxonomy Extension Schema
0 CAL **	XBRL Taxonomy Extension Calculation Linkbase
0 DEF **	XBRL Taxonomy Extension Definition Linkbase
0 LAB **	XBRL Taxonomy Extension Label Linkbase
0 PRE **	XBRL Taxonomy Extension Presentation Linkbase

* Management contract, compensatory plan or agreement

** Filed herewith

Exhibit 3 is restated for the purposes of the disclosure requirements of Item 60 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)

Index of Financial Statements

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 3 , 20 4 and 20 5 and the results of their operations and their cash flows for each of the three years in the period ended December 3 , 20 5 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 3 , 20 5, based on criteria established in *Internal Control Integrated Framework* (20 3) 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 integrated audits 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

As discussed in Note 20 to the consolidated financial statements, the Company changed the classification and presentation of debt issuance costs and deferred income taxes in 20 5

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

March , 20 6

/s/ PricewaterhouseCoopers LLP
Dallas, Texas

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(In millions)

	December 31, 2014		December 31, 2015
ASSETS			
Current assets:			
Cash and cash equivalents	$	255 8	$ 202.3
Restricted cash equivalents		0 6	7.2
Marketable securities		2 7	2.0
Accounts and other receivables, net		27 3	218.9
Refundable income taxes		8 7	7.4
Receivable from affiliates		23 9	10.3
Land held for development		5.0	9.9
Inventories, net		443 0	405.1
Other current assets		7 6	23.1
Total current assets		,048 6	896.2
Other assets:			
Marketable securities		255 6	254.9
Investment in TiO2 manufacturing joint venture		89 0	82.9
Goodwill		379 7	379.7
Deferred income taxes		60 9	1.3
Pension asset			1.7
Other assets		277 8	255.0
Total other assets		,63 0	975.5
Property and equipment:			
Land		49	45.4
Buildings		263	239.7
Equipment		, 39 9	1,061.6
Treatment, storage and disposal facilities		59 9	159.5
Mining properties		52 0	35.5
Construction in progress		26 2	33.1
		,690 2	1,574.8
Less accumulated depreciation		956 6	909.1
Net property and equipment		733 6	665.7
Total assets	$	2,945 2	$ 2,537.4

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS (CONTINUED)

(In millions, except share data)

	December 31, 2014	December 31, 2015
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Current maturities of long term debt	$ 9 3	$ 9.5
Accounts payable	36 2	104.8
Accrued liabilities	28 0	121.1
Payable to affiliates	46 0	45.5
Income taxes	7.8	5.7
Total current liabilities	327 3	286.6
Noncurrent liabilities:		
Long term debt	9 97	951.0
Deferred income taxes	399 8	321.0
Accrued pension costs	249 4	216.8
Accrued environmental remediation and related costs	08 3	108.7
Accrued postretirement benefits costs	4	11.8
Other liabilities	2 7	114.6
Total noncurrent liabilities	,804 0	1,723.9
Equity:		
Valhi stockholders' equity:		
Preferred stock, $ 0 par value; 5,000 shares authorized; 5,000 shares issued	667.3	467.3
Common stock, $ 0 par value; 500 0 million shares authorized; 355 2 million shares issued and outstanding	3 6	3.6
Additional paid in capital		
Retained earnings (deficit)	4 9	(155.6)
Accumulated other comprehensive loss	(48 6)	(197.0)
Treasury stock, at cost 3 2 million shares	(49 6)	(49.6)
Total Valhi stockholders' equity	477 6	268.7
Noncontrolling interest in subsidiaries	336 3	258.2
Total equity	8 3.9	526.9
Total liabilities and equity	$ 2,945 2	$ 2,537.4

Commitments and contingencies (Notes 9, 2, 6 and 7)

See accompanying Notes to Consolidated Financial Statements

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

(In millions, except per share data)

	Years ended December 31, 2013	2014	2015
Revenues and other income:			
Net sales	$,863 6	$,862 6	$ 1,532.9
Other income, net	88 0	42 0	32.0
Total revenues and other income	,95 6	,904 6	1,564.9
Costs and expenses:			
Cost of sales	,729 4	,459 8	1,310.0
Selling, general and administrative	375	276	269.0
Loss on prepayment of debt, net	8 9		
Interest	56	56 7	59.8
Total costs and expenses	2, 69 5	,792 6	1,638.7
Income (loss) before income taxes	(2 7 9)	2 0	(73.8)
Income tax expense (benefit)	(9 0)	32 5	97.3
Net income (loss)	(26 9)	79 5	(171.1)
Noncontrolling interest in net income (loss) of subsidiaries	(28 9)	25 7	(37.5)
Net income (loss) attributable to Valhi stockholders	$ (98 0)	$ 53.8	$ (133.6)
Basic and diluted net income (loss) per share	$ (29)	$ 6	$ (.39)
Cash dividends per share	$ 20	$	$ .08
Basic and diluted weighted average shares outstanding	342 0	342 0	342.0

See accompanying Notes to Consolidated Financial Statements

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)

(In millions)

	Years ended December 31,		
	2013	2014	2015
Net income (loss)	$ (26.9)	$ 79.5	$ (171.1)
Other comprehensive income (loss), net of tax:			
Currency translation	7.5	(08.8)	(77.8)
Interest rate swap			(1.8)
Marketable securities	0.3	(2.2)	(7.5)
Defined benefit pension plans	3.2	(7.6)	12.6
Other postretirement benefit plans	3.2	(2.5)	(.7)
Total other comprehensive income (loss), net	5.3	(202.0)	(74.4)
Comprehensive loss	(73.8)	(122.5)	(245.5)
Comprehensive loss attributable to noncontrolling interest	(9.8)	(35.7)	(63.5)
Comprehensive loss attributable to Valhi stockholders	$ (64.0)	$ (86.8)	$ (182.0)

See accompanying Notes to Consolidated Financial Statements

VALHI, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

Years ended December 31, 2013, 2014 and 2015

(In millions)

	Valhi Stockholders' Equity							
	Preferred stock	Common stock	Additional paid-in capital	Retained earnings (deficit)	Accumulated other comprehensive income (loss)	Treasury stock	Noncontrolling interest	Total equity
Balance at December 31, 2012	$ 667.3	$ 3.6	$ 78.9	$ 75.4	$ (42.0)	$ (49.6)	$ 358	$ [illegible]09.7
Net loss				(98.0)			(28.9)	(26.9)
Cash dividends			(50.9)	(7.0)			(8.2)	(86.[illegible])
Other comprehensive income, net					34.0		9	53
Noncontrolling interest of businesses acquired							6.5	6.5
Equity transactions with noncontrolling interest, net			(4)				([illegible])	(5)
Balance at December 31, 2013	667.3	3.6	27.6	(39.6)	(8.0)	(49.6)	[illegible]39.5	992.8
Net income				53.8			25.7	79.5
Cash dividends			(38.0)	(9.3)			(9.3)	(56.6)
Other comprehensive loss, net					(40.6)		(6[illegible].4)	(202.0)
Equity transactions with noncontrolling interest, net			4				(2)	.2
Balance at December 31, 2014	667.3	3.6		4.9	([illegible]48.6)	(49.6)	336.3	[illegible]3.9
Net loss				(133.6)			(37.5)	(171.1)
Cash dividends			(.2)	(26.9)			(14.6)	(41.7)
Other comprehensive loss, net					(48.4)		(26.0)	(74.4)
Equity transactions with noncontrolling interest, net			.1					.2
Balance at December 31, 2015	**$ 667.3**	**$ 3.6**	**$ -**	**$ (155.6)**	**$ (197.0)**	**$ (49.6)**	**$ 258.2**	**$ 526.9**

See accompanying Notes to Consolidated Financial Statements

VALHI, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In millions)

		Years ended December 31,	
	2013	2014	2015
Cash flows from operating activities:			
Net income (loss)	$ (26.9)	$ 79.5	$ (171.1)
Depreciation and amortization	74.5	78.4	69.9
Net (gain) loss from:			
Bargain purchase and re-measurement of our existing investment in acquiree	(54.6)		
Securities transactions, net	(.2)	(.3)	
Disposal of property and equipment, net	.5	.9	.8
Loss on prepayment of debt, net	8.9		
Noncash interest expense	.5	2.1	1.5
Benefit plan expense greater (less) than cash funding	7.0	(3.[illegible])	1.9
Deferred income taxes	(4.8)	0.0	85.7
Distributions from TiO2 manufacturing joint venture, net	0.9	0.6	6.5
Other, net	6.0	8.0	7.8
Change in assets and liabilities:			
Accounts and other receivables, net	32.9	(27.2)	22.2
Land held for development, net		(6.8)	7.1
Inventories, net	220.0	(55.[illegible])	(6.4)
Accounts payable and accrued liabilities	73.4	(26.4)	(13.9)
Income taxes	(9.6)	5.4	(.5)
Accounts with affiliates	(8.7)	(3.2)	17.1
Other noncurrent assets	(2.[illegible])	2.8	(2.5)
Other noncurrent liabilities	.2	4.8	2.7
Other, net	8.2	(3.3)	(5.9)
Net cash provided by operating activities	7[illegible]	67.3	22.5

VALHI, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(In millions)

	Years ended December 31, 2013	2014	2015
Cash flows from investing activities:			
Capital expenditures	$ (74.6)	$ (72.7)	$ (54.6)
Capitalized permit costs	(.3)	(.3)	(1.3)
Acquisition of a businesses	(5.3)		
Cash of businesses acquired	27.4		
Purchases of marketable securities	(7.9)	(6.3)	(13.6)
Proceeds from:			
Disposal of marketable securities		.5	15.0
Collection of real estate related note receivable	3.0		
Disposal of assets held for sale	.8		
Change in restricted cash equivalents, net	(9.9)	4.6	(2.9)
Other, net	( )	.5	.4
Net cash used in investing activities	(56.2)	(55)	(57.0)
Cash flows from financing activities:			
Indebtedness:			
Borrowings	493.8	55.6	84.9
Principal payments	(693.3)	(343.)	(53.4)
Deferred financing costs paid		(.6)	
Valhi cash dividends paid	(67.9)	(37.3)	(27.1)
Distributions to noncontrolling interest in subsidiaries	(8.2)	(8.9)	(15.0)
Purchase of Kronos common stock	(.7)		
Other, net			
Net cash provided by (used in) financing activities	(286.2)	.02	(10.6)
Net increase (decrease)	$ (225.3)	$ 22.4	$ (45.1)

VALHI, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(In millions)

	Years ended December 31,		
	2013	2014	2015
Cash and cash equivalents – net change from:			
Operating, investing and financing activities	$ (225.3)	$ 22.4	$ **(45.1)**
Effect of exchange rates on cash	2	(9.4)	**(8.4)**
Net change for the year	(224)	3.0	**(53.5)**
Balance at beginning of year	366.9	42.8	**255.8**
Balance at end of year	$ 42.8	$ 255.8	$ **202.3**
Supplemental disclosures:			
Cash paid for:			
Interest, net of amounts capitalized	$ 55.0	$ 53.9	$ **56.6**
Income taxes, net	5.6	33.4	**10.2**
Noncash investing activities:			
Change in accruals for capital expenditures	4.6	6.5	**6.7**
Accruals for capital lease additions		8.9	
Noncash financing activities:			
Amounts issued in connection with business combination:			
Promissory note	9		
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, 2015

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 , Waste Control Specialists LLC ("WCS"), Tremont LLC, Basic Management, Inc ("BMI") and The LandWell Company ("LandWell") 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 a wholly owned subsidiary of Contran Corporation ("Contran"), which owns approximately 93% of our outstanding common stock at December 3 , 20 5 All of Contran's outstanding voting stock is held by a family trust established for the benefit of Lisa K Simmons and Serena Simmons Connelly and their children, for which Ms Simmons and Ms Connelly are co trustees, or is held directly by Ms Simmons and Ms Connelly or entities related to them Consequently, Ms Simmons and Ms Connelly 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 8 5, *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 8

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

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 costs 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 BMI and LandWell, for which we acquired a controlling interest in December 20 3, 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 TiO2 manufacturing joint venture. We account for our investment in a 50% owned manufacturing joint venture by the equity method See Note 7

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 amortizes 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 20 3, 20 4 and 20 5 we capitalized $ 6 million, $2 9 million and $ 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	0 to 40 years
Machinery and equipment	3 to 20 years
Mine development costs	Units of production
Landfill disposal costs	Units of consumption

We use accelerated depreciation methods for income tax purposes, as permitted Upon the sale or retirement of an asset, we remove the related cost and accumulated depreciation from the accounts and recognize any gain or loss in income currently

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 of our 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 or asset group 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 4 0, *Asset Retirement and Environmental Obligations* We recognize the fair value of a liability for an asset retirement obligation in accordance with ASC Topic 4 0 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 0

Long-term debt. We state long term debt net of any unamortized original issue premium, discount or deferred financing costs 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

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 7 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 We made net cash payments for income taxes to Contran of $6 5 million in 20 3, $ 9 3 million in 20 4 and $2 5 million in 20 5

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 affiliate who are not members of the Contran Tax Group and undistributed earnings of foreign subsidiaries which are not deemed to be permanently reinvested Deferred income tax assets and liabilities for each tax paying jurisdiction in which we operate are netted and presented as either a noncurrent deferred income tax asset or liability as applicable 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 $645 million at December 3 , 20 5 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 2

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 3 , 20 4 and 20 5, we had not recognized any material receivables for recoveries See Note 7

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 (meaning we do not recognize these taxes in either our revenues or in our costs and expenses)

Certain retail land sales of our Real Estate Management and Development Segment are recognized under the under the percentage of completion method when we are required to complete property development and improvements after title passes to the buyer and when all of the criteria of ASC 970 605 30 are met Under such method, revenues and profits are recognized in the same proportion of our progress towards completion of our contractual obligations, with our progress measured by costs incurred as a percentage of total costs estimated to be incurred Such costs incurred and total estimated costs include amounts specifically identifiable with the parcels sold as well as certain development costs for the entire residential/planned community which are allocated to the parcels sold under applicable GAAP Other retail land sales are generally recognized by the full accrual method of accounting at closing, in which title passes to the customer and we have no remaining contractual obligations to the buyer

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 20 3, $95 million in 20 4 and $87 million in 20 5 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 were approximately $2 million in 20 3 and $ million in each of 20 4 and 20 5 Research, development and certain sales technical support costs were approximately $ 8 million in 20 3, $ 9 million in 20 4 and $ 6 million in 20 5

Note 2 Business and geographic segments:

Business segment	Entity	% controlled at December 31, 2015
Chemicals	Kronos	80%
Component products	CompX	87%
Waste management	WCS	00%
Real estate management and development	BMI and LandWell	63% 77%

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 We own 63% of BMI Our control of LandWell includes the 27% we hold directly and 50% held by BMI 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 four 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
- *Component Products* We operate in the component products industry through our majority control of CompX CompX is a leading manufacturer of security products used in the recreational transportation, postal, office and institutional furniture, cabinetry, tool storage, healthcare and a variety of other industries CompX is also a leading manufacturer of stainless steel exhaust systems, gauges, throttle controls and trim tabs for the recreational marine industry All of CompX production facilities are in the United States
- *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 20 2, and the Federal LLRW site commenced operations in 20 3 We reached an agreement for the sale of our Waste Management Segment in November 20 5, see Note 3
- *Real Estate Management and Development* We operate in real estate management and development through our majority control of BMI and LandWell BMI provides utility services to certain industrial and municipal customers and owns real property in Henderson, Nevada LandWell is engaged in efforts to develop certain land holdings for commercial, industrial and residential purposes in Henderson, Nevada In December 20 3, we acquired a controlling interest in each of these companies, and they are included in our results of operations and cash flows beginning on January , 20 4 See Note 3

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 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 20 3, 20 4 or 20 5 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's assets. Corporate assets are not attributable to any operating segment and consist principally of cash and cash equivalents, restricted cash equivalents and marketable securities.

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Net sales:			
Chemicals	$,732.4	$,65 9	$ 1,348.8
Component products	92.0	03.9	109.0
Waste management	39.2	66.5	45.0
Real estate management and development		40.3	30.1
Total net sales	$,863.6	$,862.6	$ 1,532.9
Cost of sales:			
Chemicals	$,622.6	$,304.6	$ 1,158.8
Component products	64.5	7 6	75.6
Waste management	42.3	49.7	50.9
Real estate management and development		33.9	25.4
Total cost of sales	$,729.4	$,459.8	$ 1,310.0
Gross margin:			
Chemicals	$ 09.8	$ 347.3	$ 190.3
Component products	27.5	32.3	33.4
Waste management	(3)	6.8	(5.5)
Real estate management and development		6.4	4.7
Total gross margin	$ 34.2	$ 402.8	$ 222.9
Operating income (loss):			
Chemicals	$ (25.4)	$ 56.8	$ 7.1
Component products	9.3	3.6	14.0
Waste management	(22.6)	(2.2)	(26.5)
Real estate management and development		2.0	
Total operating income (loss)	(38.7)	70.2	(5.4)
Equity in earnings of investee	5		
General corporate items:			
Securities earnings	26.6	26.9	26.5
Insurance recoveries	9.4	0.4	3.7
Gain on bargain purchase and remeasurement of our existing investment in acquiree	54.6		
General expenses, net	(05.3)	(38.8)	(39.6)
Loss on prepayment of debt, net	(8.9)		
Interest expense	(56)	(56.7)	(59.0)
Income (loss) before income taxes	$ (2 7.9)	$ 2.0	$ (73.8)

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Depreciation and amortization:			
Chemicals	$ 52 8	$ 5 9	$ 44.3
Component products	3 3	3 5	3.5
Waste management	8 4	20 3	19.3
Real estate management and development		2 7	2.8
Total	$ 74 5	$ 78 4	$ 69.9
Capital expenditures:			
Chemicals	$ 67 6	$ 6 3	$ 47.5
Component products	3 5	2 8	4.2
Waste management	3 5	4 5	1.7
Real estate management and development		4 0	.2
Corporate			
Total	$ 74 6	$ 72 7	$ 54.6

	December 31,		
	2013	2014	2015
	(In millions)		
Total assets:			
Operating segments:			
Chemicals	$,975 8	$ 2,00 2	$ 1,617.6
Component products	80 6	83	88.7
Waste management	270	257 7	231.9
Real estate management and development	233 6	246	232.9
Corporate and eliminations	37 6	357	366.3
Total	$ 2,95 7	$ 2,945 2	$ 2,537.4

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 3 , 20 5 the net assets of our non U S subsidiaries included in consolidated net assets approximated $422 million (in 20 4 the total was $703 million)

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Net sales point of origin:			
United States	$ 96 5	$ 993 7	$ 841.9
Germany	9 3 8	844	690.0
Canada	246 5	252 3	216.9
Belgium	254 6	249 3	198.8
Norway	26 3	256 8	183.5
Eliminations	(776)	(733 6)	(598.2)
Total	$,863 6	$,862 6	$ 1,532.9
Net sales point of destination:			
North America	$ 690 5	$ 753 2	$ 604.0
Europe	905 0	883 6	700.9
Asia and other	268	225 8	228.0
Total	$,863 6	$,862 6	$ 1,532.9

	December 31,		
	2013	2014	2015
	(In millions)		
Net property and equipment:			
United States	$ 232 8	$ 234 4	$ 227.1
Germany	292 9	259 5	229.8
Canada	67	63 4	56.0
Norway	00 9	85 5	71.9
Belgium	02 7	90 8	81.8
Total	$ 796 4	$ 733 6	$ 665.7

Note 3 Business combinations, dispositions and related transactions:

Kronos Worldwide, Inc.

Prior to 20 3, 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 would use cash on hand to acquire the shares Repurchased shares will be added to Kronos' treasury and cancelled During 20 3 Kronos repurchased approximately 49,000 shares for an aggregate of $ 7 million in cash under its repurchase program The 20 3 purchases are the only purchases Kronos has made to date under the plan and at December 3 , 20 5 approximately 95 million shares are available for repurchase

CompX International Inc.

Prior to 20 3, 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 would 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 20 3, 20 4 or 20 5, and at December 3 , 20 5 approximately 678,000 shares were available for purchase under these authorizations

Basic Management, Inc. and The LandWell Company

Prior to December 20 3, we owned a 32% interest in BMI, which among other things provides utility services to an industrial park located in Henderson, Nevada, and is responsible for the delivery of water to the city of Henderson, Nevada and various other users through a water distribution system owned by BMI We also had a 2% 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 2% interest in LandWell by the equity method of accounting See Note 7 Three other entities owned the remaining ownership interest in BMI (a 32% interest, a 3 % interest and a 5% interest) and LandWell (a 2 % interest, a 5% 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 20 0, the 3 % ownership interest in BMI and the 5% 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's plan of reorganization, in November 20 0 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 20 2, 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 20 3, 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 20 3 we completed the acquisition of the 3 % ownership interest in BMI and the 5% 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 interest 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 interest of BMI and our 27% direct ownership interest 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 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, without the payment of additional consideration to NERT These five additional parcels, which NERT had also acquired as part of Tronox's 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 $ 9 million promissory note secured by the real property acquired, and a $ 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 was accounted for as a business combination under GAAP The application of the purchase method of accounting for business combinations required us to use significant estimates and assumptions in the determination of the estimated fair value of assets acquired and liabilities assumed; it also required us to re measure 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 were based upon assumptions we believed were reasonable, and where appropriate, included assistance from independent third party valuation firms

The $ 9 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 from NERT 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 was equal to its $ 9 million face amount We made $ 7 million and $ 3 million in principal prepayments during 20 4 and 20 5, respectively, under the terms of the note

The $ 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 was approximately $8 2 million, which was determined by discounting the $ 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 20 0, 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

In January 20 4, we engaged an independent third party valuation firm to assist us with the overall fair value determination for a portion of the assets acquired for financial reporting purposes in accordance with ASC 805 The third party valuation firm assisted us in the valuation of the land held for development we acquired, substantially all of the property, plant and equipment acquired and a portion of the other noncurrent assets acquired The land held for development we acquired consisted of approximately 2, 00 acres zoned for residential/planned community purposes and approximately 400 acres zoned for commercial and light industrial use In estimating the value of the land held for development we acquired, the valuation firm used a sales comparison (or market) approach, in which the value of each parcel acquired was estimated by comparing it to similar properties that had recently been sold or were currently being marketed for sale The firm consulted local brokers, appraisers and databases for recent sales of comparable property within the Henderson, Nevada area The available market data was then investigated, analyzed and compared to each parcel The material factors considered by the valuation firm when investigating, analyzing and comparing the recent sales include characteristics of such other sales (e g , type of property rights conveyed, non market oriented financing (if any), any atypical conditions of the sale) and the physical characteristics of the property underlying such sales (e g , location, topography, configuration, exposure/frontage, condition, zoning) As applicable, the valuation firm made appropriate adjustments to such factors for any dissimilar characteristics between such other sales and LandWell's land held for development In addition, we (as well as management of BMI and LandWell) reviewed the fair value amounts we received from such valuation firm to determine that such fair values were reasonable and consistent with our knowledge and experience with the local market, including the consideration of certain acreage in the residential/ planned community that was under contract with homebuilders in December 20 3 or in the final stages of negotiation with homebuilders in December 20 3 and subsequently became under contract in early 20 4

For financial reporting purposes, the assets acquired and liabilities assumed of BMI and LandWell were included in our Consolidated Balance Sheet beginning as of December 3 , 20 3, and the results of the operations and cash flows of BMI and LandWell are included in our Consolidated Statements of Operations and Cash Flows beginning January , 20 4 Our costs associated with the acquisition were 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 0 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 20 3, 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 $ 6 8 million carrying value at the acquisition date

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, 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 In addition following the 2008 economic downturn, LandWell's sales were substantially reduced as compared to prior years and LandWell did not recognize any material land sales in the 2008 to 20 3 time period As a result, we recognized a pre tax bargain purchase gain of $28 0 million in December 20 3

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 one parcel and option to acquire the remaining four parcels collectively were estimated to have an aggregate fair value of $ 4 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 (which along with the gain on remeasurement of our existing investment in BMI and LandWell, aggregated $54 6 million and was recognized in the fourth quarter of 20 3), 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 Our final purchase price allocation indicated below was based upon the final fair value appraisal report issued by the independent valuation firm 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 3 input under ASC 820 Such final purchase price allocation did not change from our previously reported preliminary purchase price allocation

Based on our analysis of the amounts of the transaction at December 3 , 20 3 we recognized the following:

		Amount (In millions)
Consideration:		
Cash	$	53
Promissory note payable		9
Deferred payment, obligation ($ million face value)		82
Total fair value of consideration		326
Fair value of our existing equity interest in BMI and LandWell		434
Bargain purchase gain recognized		280
Total	$	040
Allocation of purchase price to identifiable assets acquired and liabilities assumed:		
Cash	$	274
Land held for development:		
Current		43
Noncurrent		58
Other current assets		94
Property, plant and equipment		290
Intangible asset		5
Other noncurrent assets		34
Long term debt		(43)
Other liabilities		(669)
Total net identifiable assets		655
Noncontrolling interest in BMI and LandWell		(6 5)
Total	$	040

The pro forma effect on our Consolidated Statement of Operations for 20 3, assuming the acquisition of BMI and LandWell had occurred at the beginning of such period, is not material

Waste Control Specialists LLC

On November 8, 20 5, we entered into an agreement with Rockwell Holdco, Inc ("Rockwell"), for the sale of WCS to Rockwell for $270 million in cash, $20 million face amount in Series A Preferred Stock of Rockwell plus the assumption of all of WCS' third party indebtedness incurred prior to the date of the agreement Additionally, Rockwell and its affiliates will assume all financial assurance obligations related to the WCS business Rockwell is the parent company of Energy*Solutions*, Inc Completion of the sale is subject to certain customary closing conditions, including the receipt of U S anti trust approval, and is expected to close in the first half of 20 6, assuming all closing conditions are satisfied There can be no assurance that any such sale of WCS would be completed Due to, among other things, the size of our WCS business relative to our other businesses in terms of both net sales and asset size, the disposal of WCS would not constitute a strategic shift that would have a major effect on our consolidated operations and financial results under the guidance in ACS 205 20 Accordingly, assuming the sale of WCS is completed, WCS would not be presented as discontinued operations in our Consolidated Financial Statements See Note 2 for additional information regarding the operations of the Waste Management Segment Significant items included in our Consolidated Balance Sheets related to WCS at December 3 , 20 4 and 20 5 included:

	December 31,			
	2014		2015	
	(In millions)			
ASSETS				
Current assets	$	4 6	$	10.1
Operating permits		53 2		48.1
Restricted cash		0		16.2
Property and equipment, net		6 5		150.0
LIABILITIES				
Current portion of long term debt	$	4 5	$	4.9
Payable to Contran		26		26.1
Long term debt		76 4		71.4
Accrued noncurrent closure and post closure costs		25 7		27.4

Note 4 Marketable securities:

	Market value	Cost basis	Unrealized losses, net
	(In millions)		
December 31, 2014:			
Current assets	$ 2 7	$ 2 7	$
Noncurrent assets:			
The Amalgamated Sugar Company LLC	$ 250 0	$ 250 0	$
Other	5 6	5 8	(2)
Total	$ 255 6	$ 255 8	$ (2)
December 31, 2015:			
Current assets	$ 2.0	$ 2.0	$
Noncurrent assets:			
The Amalgamated Sugar Company LLC	$ 250.0	$ 250.0	$
Other	4.9	5.1	(.2)
Total	$ 254.9	$ 255.1	$ (.2)

	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, 2014:				
Current assets	$ 2 7	$ 7	$ 0	$
Noncurrent assets:				
The Amalgamated Sugar Company LLC	$ 250 0	$	$	$ 250 0
Fixed income securities	3		3	
Mutual funds and common stocks	2 5	2 5		
Total	$ 255 6	$ 2 5	$ 3	$ 250 0
December 31, 2015:				
Current assets	$ 2.0	$	$ 2.0	$
Noncurrent assets:				
The Amalgamated Sugar Company LLC	$ 250.0	$	$	$ 250.0
Fixed income securities	1.4		1.4	
Mutual funds and common stocks	3.5	3.5		
Total	$ 254.9	$ 3.5	$ 1.4	$ 250.0

Amalgamated Sugar. Prior to 20 3, 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 5

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 20 3, 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 $ 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 3 , 20 5, 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 5 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 20 3, 20 4 or 20 5 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 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 3)

Note 5 Accounts and other receivables, net:

	December 31,	
	2014	2015
	(In millions)	
Trade accounts receivable:		
Kronos	$ 230 9	$ 194.8
CompX	8 8	8.8
WCS	7 7	5.2
BMI/LandWell	4	1.2
VAT and other receivables	24 3	20.1
Allowance for doubtful accounts	(8)	(1.2)
Total	$ 27 3	$ 228.9

Note 6 Inventories, net:

	December 31,	
	2014	2015
	(In millions)	
Raw materials:		
Chemicals	$ 76 0	$ 75.9
Component products	3 4	2.8
Total raw materials	79 4	78.7
Work in process:		
Chemicals	32 9	21.1
Component products	0 3	9.3
Total in process products	43 2	30.4
Finished products:		
Chemicals	253 2	233.1
Component products	3 2	3.0
Total finished products	236 4	236.1
Supplies (primarily chemicals)	64 0	60.0
Total	$ 443 0	$ 405.2

Note 7 Investment in TiO_2 manufacturing joint venture and other assets:

	December 31,	
	2014	2015
	(In millions)	
Other assets:		
Land held for development	$ 63	$ 157.2
Waste disposal site operating permits, net	53.2	48.1
Restricted cash	3.9	19.6
IBNR receivables	6.8	7.0
Capital lease deposit	6.2	6.2
Intangible assets	5	5.1
Other	27.5	11.8
Total	$ 277.8	$ 255.0

Investment in TiO_2 manufacturing joint venture. Our Chemicals Segment and another TiO_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 Lake Charles, 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 2015, 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,		
	2013	2014	2015
	(In millions)		
Distributions from LPC	$ 70.7	$ 48.0	$ 48.2
Contributions to LPC	(59.8)	(37.4)	(41.7)
Net distributions	$ 0.9	$ 0.6	$ 6.5

Summary balance sheets of LPC are shown below:

	December 31,	
	2014	2015
	(In millions)	
ASSETS		
Current assets	$ 07.4	$ 96.2
Property and equipment, net	0.6	110.1
Total assets	$ 2.8.0	$ 206.3
LIABILITIES AND PARTNERS' EQUITY		
Other liabilities, primarily current	$ 37.3	$ 37.8
Partners' equity	80.7	168.5
Total liabilities and partners' equity	$ 2.8.0	$ 206.3

Summary income statements of LPC are shown below:

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Revenues and other income:			
Kronos	$ 224.5	$ 193.1	$ 176.5
Tioxide	224.6	193.8	162.5
Total	449.1	386.9	339.0
Cost and expenses:			
Cost of sales	448.7	386.4	338.5
General and administrative	.4	.5	.5
Total	449.1	386.9	339.0
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, was not material to any period presented. Certain selected combined financial information of BMI and LandWell is summarized below.

	Twelve Months ended September 30, 2013
	(In millions)
Total revenues	$ 9.5
Loss before income taxes	(3.9)
Net loss	(3.7)

Land held for development. The land held for development relates to BMI and LandWell and is discussed in Notes 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 LLRW license in September 2009 Our LLRW facilities commenced operations in 20 2, at which time we began amortizing such license Amortization of capitalized operating permit costs was $6 5 million in 20 3, $6 6 million in 20 4 and $6 3 million in 20 5 Our estimated aggregate amortization expense for all our of capitalized permit costs as of December 3 , 20 5 is approximately $6 3 million in each of 20 6 and 20 7, $5 7 million in 20 8 and $5 3 million in each of 20 9 and 2020 Capitalized permit costs are stated net of accumulated amortization of $25 3 million at December 3 , 20 4 and $3 6 million at December 3 , 20 5 The components of net capitalized permit costs are presented in the table below

	December 31,			
	2014		2015	
	(In millions)			
Net permit costs for issued permits which are being amortized:				
LLRW license (expires in 2024)	$	49 6	$	44.7
Byproduct license (expires in 20 8)		3 5		2.5
Other (expires 20 5 2024)		—		.1
Total amortized permits		53 2		47.3
Permits not being amortized		—		.8
Total	$	53 2	$	48.1

Other. We have certain related party transactions with LPC, as more fully described in Note 6

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 0 and 6

Restricted cash relates primarily relates to our Waste Management Segment In April 20 4, $ 8 0 million of such restricted cash was released to WCS See Note 7

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

Upon acquiring a controlling interest in our Real Estate Management and Development segment in December 20 3, we recognized an indefinite lived customer relations intangible asset of $5 million for long term contracts related to water delivery services to the City of Henderson, Nevada and various other users through a water system owned by BMI See Note 3

Note 8 Goodwill:

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 is from our various step acquisitions of NL and Kronos which occurred prior to 20 3, as goodwill was determined prior to the adoption of the equity transaction framework provisions of ASC Topic 8 0 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 security products reporting unit within that operating segment

	Operating segment					
	Chemicals		Component Products		Total	
	(In millions)					
Balance at December 31, 2013, 2014 and 2015	$	352.6	$	27.1	$	379.7

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 input, while discounted cash flows are a Level 3 input We also consider control premiums when assessing fair value using quoted market prices 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. 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 If the fair value of an evaluated asset is less than its book value, the asset is written down to fair value Prior to 20 3, 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 0 35 If the carrying amount of goodwill exceeds its implied fair value, an impairment charge is recorded In 20 3 we adopted the guidance in ASU No 20 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 20 5 for each of our reporting units and concluded there was no impairment of the goodwill for those reporting units The 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 20 5 We also tested our goodwill for impairment in connection with our annual goodwill impairment test during the third quarter of 20 3 and 20 4 No impairment was indicated as part of such 20 3, 20 4 or 20 5 annual review of goodwill

Prior to 20 3, we recorded an aggregate $ 6 5 million goodwill impairment, mostly with respect to our Component Products Segment Our consolidated gross goodwill at December 3 , 20 5 is $396 2 million

Note 9 Long-term debt

	December 31,	
	2014	2015
	(In m ll ons)	
Valhi:		
Snake River Sugar Company	$ 250 0	$ 250.0
Contran credit facility	223 7	263.8
Total Valhi debt	473.7	513.8
Subsidiary debt:		
Kronos		
Term loan	340 9	338.0
WCS		
Financing capital lease	67	65.6
Tremont		
Promissory note payable	7 4	17.1
BMI		
Bank note payable	0 2	9.3
LandWell		
Note payable to the City of Henderson	3	3.1
Other	6 6	13.6
Total subsidiary debt	455 3	446.7
Total debt	929 0	960.5
Less current maturities	9 3	9.5
Total long term debt	$ 9 9 7	$ 951.0

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 3 , 20 5, $37 5 million of the loans are recourse to us and the remaining $2 2 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 $325 million The facility, as amended, bears interest at prime plus % (4 50% at December 3 , 20 5), and is due on demand, but in any event no earlier than December 3 , 20 7 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) The average interest rate on the term loan borrowings for the year ended

December 3 , 20 5 was 4 26% During 20 5 we borrowed an additional net $40 million and at December 3 , 20 5 an additional $6 2 million was available for borrowings under the amended facility

Kronos Term loans In 20 3, Kronos voluntarily repaid its entire $400 million term loan that was issued in June 20 2 Kronos prepaid an aggregate $390 million principal amount and recognized a non cash pre tax interest charge of $8 9 million in 20 3 related to this prepayment consisting of the write off of unamortized original issue discount costs and deferred financing costs associated with such prepayment Funds for the aggregate prepayment were provided by $ 50 million of cash on hand, borrowings of $ 90 million under a 20 3 loan agreement with Contran as described below, $50 million of cash on hand and borrowings of $50 million under its revolving North American credit facility .

In February 20 4, Kronos entered into a new $350 million term loan The term loan was issued at 99 5% of the principal amount, or an aggregate of $348 3 million Kronos used $ 70 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 remaining net proceeds of the term loan are available for Kronos' general corporate purposes The new term loan:

- bears interest, at Kronos' option, at LIBOR (with LIBOR no less than 0%) plus 3 75%, or the base rate, as defined in the agreement, plus 2 75%;
- requires quarterly principal repayments of $875,000 which commenced in June 20 4, 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;
- is collateralized by, among other things, a first priority lien on (i) 00% 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' 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

In May 20 5 Kronos entered into an amendment to its term loan due in February 2020 As a result of the amendment:

- The applicable margin on outstanding LIBOR based borrowings was reduced from 3 75% to 3 00%, and the applicable margin on outstanding base rate borrowings was reduced from 2 75% to 2 00%; and
- A provision was added whereby if we elected to call all or a portion of the outstanding principal balance within six months of completing the amendment (i e before November 20 5), a % call premium of the aggregate principal amount so prepaid would apply There is no prepayment penalty applicable to any call after November 20 5 We made no such call prior to November 20 5

We accounted for such amendment to our term loan as a modification of the terms of the term loan All other terms of the term loan, including principal repayments, maturity and collateral remain unchanged We paid a $750,000 refinancing fee in connection with this amendment, which along with the existing unamortized deferred financing costs associated with the term loan are being amortized over the remaining term of the loan

The average interest rate on the term loan borrowings as of and for the year ended December 3 , 20 5 was 4 0% and 4 29%, respectively The carrying value of the term loan at December 3 , 20 5 is stated net of unamortized original issue discount of $ 2 million and debt issuance costs of $4 7 million (at December 3 , 20 4 the amounts were $ 5 million and $5 0 million) See Note 20

See Note 8 for a discussion of the interest rate swap we entered into in the third quarter of 20 5 pursuant to our interest rate risk management strategy

Note payable to Contran As discussed above, in February 20 3 Kronos entered into a promissory note with Contran This loan from Contran contained terms and conditions similar to the terms and conditions of the prior $400 million term loan, except that the loan from Contran was unsecured and contained no ongoing financial maintenance covenant The independent members of Kronos' board of directors approved the terms and conditions of the loan from Contran In 20 3, Kronos borrowed $ 90 million and subsequently repaid $20 million In February 20 4 Kronos used $ 70 million of the proceeds from its new term loan and prepaid the remaining balance owed to Contran under this note payable (without penalty), and the note payable to Contran was cancelled

Revolving North American credit facility In June 20 2, Kronos entered into a $ 25 million revolving bank credit facility which matures in June 20 7 Borrowings under the revolving credit facility are available for Kronos' 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 $ 5 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 5% to 2 0% or at the applicable base rate, as defined in the agreement, plus a margin ranging from 5% to 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 (fixed charge coverage ratio, as defined) to be at least to 0 During 20 4, Kronos borrowed $8 0 million and repaid an aggregate of $92 million under this facility Kronos had no borrowings or repayments under this facility during 20 5, and at December 3 , 20 5 Kronos had approximately $68 3 million available for borrowing under this revolving facility

Revolving European credit facility Kronos' operating subsidiaries in Germany, Belgium, Norway and Denmark have a € 20 million secured revolving bank credit facility that, matures in September 20 7 Kronos may denominate borrowings in Euros, Norwegian kroner or U S dollars Outstanding borrowings bear interest at LIBOR plus 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

Kronos had no borrowing or repayments under this facility during 20 5 and at December 3 , 20 5, there were no outstanding borrowings under this facility Kronos' European credit facility requires the maintenance of certain financial ratios Kronos' European revolving credit facility requires the maintenance of certain financial ratios, and one of such requirements is based on the ratio of net debt to last twelve months earnings before income tax, interest, depreciation and amortization expense (EBITDA) of the borrowers Based upon the borrowers' last twelve months EBITDA as of December 3 , 20 5 and the net debt to EBITDA financial test, Kronos' borrowing availability at December 30, 20 5 is approximately 9% of the credit facility, or €23 million ($25 3 million)

Canada In December 20 , 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 $4 5 million through December 3 , 20 5 (no additional amounts are expected to be borrowed under this facility) 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 equal monthly payments commencing in 20 8 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 3 , 20 5, Kronos had Cdn $4 5 million (USD $3 3 million) outstanding under this agreement

Prior to December 3 , 20 4, Kronos' Canadian subsidiary had an aggregate of Cdn $7 9 million of letters of credit outstanding issued by a bank its behalf These letters of credit were issued in connection with the appeal of a Canadian income tax assessment discussed in Note 2 Upon the successful completion of the appeal in 20 4, such letters of credit were cancelled, and an equivalent amount of restricted cash deposits which had been collateralizing such letters of credit, classified as noncurrent restricted cash, were released

WCS Financing capital lease Prior to 20 3, WCS closed under a Sale and Purchase Agreement with the County of Andrews, Texas 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, 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 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 6

Other. Tremont's promissory note payable is discussed in Notes 3 and 6

In January 20 3, BMI entered into an $ 9 million bank note payable to Meadows Bank The proceeds of the note were used to refinance previously outstanding debt obligations The note requires monthly installments of $ 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 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 Consolidated Balance Sheets At December 3 , 20 5 the note had an outstanding balance of $9 4 million and is stated net of debt issuance costs of $ million The interest rate as of and for the year ended December 3 , 20 5 was 3 50% and 3 25%, respectively

In May 20 2, LandWell entered into a $3 9 million promissory note payable to 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, see Note 7 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 million is deemed to be maturing in 2020

Aggregate maturities of long-term debt at December 31, 2015

Aggregate maturities of debt at December 3 , 20 5 are presented in the table below

Years ending December 31,	Amount (In millions)
Gross amounts due each year:	
20 6	$ 14.7
20 7	276.3
20 8	12.7
20 9	12.3
2020	341.8
202 and thereafter	366.0
Subtotal	1,023.8
Less amounts representing interest on capital leases, original issue discount and debt issuance costs	63.3
Total long term debt	$ 960.5

We are in compliance with all of our debt covenants at December 3 , 20 5

Note 10 Accounts payable and accrued liabilities:

	December 31,	
	2014	2015
	(In millions)	
Accounts payable:		
Kronos	$ 2 4	$ 96.1
CompX	3 9	2.7
WCS	4	1.3
BMI/LandWell	7 0	2.1
NL	2 3	1.9
Other	2	.7
Total	$ 36 2	$ 104.8
Current accrued liabilities:		
Employee benefits	$ 34 6	$ 24.7
Accrued sales discounts and rebates	23 0	23.9
Deferred income	9 8	21.8
Environmental remediation and related costs	0 2	11.7
Accrued workforce reduction costs		5.3
Interest rate swap contract		3.3
Other	40 4	30.4
Total	$ 28 0	$ 121.1
Noncurrent accrued liabilities:		
Reserve for uncertain tax positions	$ 34.	$ 32.9
Asset retirement obligations	27 1	28.8
Deferred income	8 9	10.2
Employee benefits	8	7.1
Insurance claims and expenses	9 5	9.6
Deferred payment obligation	8 5	8.8
Other	6 4	7.2
Total	$ 2 7	$ 114.6

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 2

Our asset retirement obligations include amounts related to the closure and post closure obligations associated with our Waste Management Segment's facility in West Texas We recognized accretion expense of $ 7 million in 20 3, $ 8 million in 20 4 and $2 0 million in 20 5 on the closure and post closure obligations We are required to provide certain financial assurance to Texas government agencies with respect to the decommissioning obligations related to such facility, as more fully described in Note 7 Certain of our affiliates have provided or assisted us in providing such financial assurance, as discussed in Note 6

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 deferred payment obligation relates to Tremont and is discussed in Notes 3 and 6

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 approximated $4 2 million in 20 3, $5 7 million in 20 4 and $5 8 million in 20 5

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 $ 5 8 million to all of our defined benefit pension plans during 20 6 Benefit payments to plan participants out of plan assets are expected to be the equivalent of:

20 6	$ 23 4 million
20 7	23 7 million
20 8	24 2 million
20 9	24 7 million
2020	25 6 million
Next 5 years	4 2 million

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

	Years ended December 31,	
	2014	2015
	(In millions)	
Change in projected benefit obligations ("PBO"):		
Balance at beginning of the year	$ 62 0	$ 70.2
Interest cost	2.9	2.7
Actuarial loss (gain)	9 9	(2.2)
Benefits paid	(4 6)	(4.1)
Balance at end of the year	$ 70 2	$ 66.6
Change in plan assets:		
Fair value at beginning of the year	$ 54 9	$ 53.6
Actual return on plan assets	2 0	(2.3)
Employer contributions	3	.4
Benefits paid	(4 6)	(4.1)
Fair value at end of year	$ 53 6	$ 47.6
Funded status	$ 6 6	$ 19.0
Amounts recognized in the Consolidated Balance Sheets:		
Accrued pension costs:		
Current	$ (3)	$ (.3)
Noncurrent	(6 3)	(18.7)
Total	(6 6)	(19.0)
Accumulated other comprehensive loss: Actuarial loss	39 5	42.0
Total	$ 22 9	$ 23.0
Accumulated benefit obligations ("ABO")	$ 70 2	$ 66.6

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 20 3, 20 4 and 20 5 were recognized as components of our accumulated other comprehensive income (loss) at December 3 , 20 2, 20 3 and 20 4, respectively, net of deferred income taxes and noncontrolling interest

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Net periodic pension benefit cost (credit) for U S plans:			
Interest cost	$ 2 4	$ 2 9	$ 2.7
Expected return on plan assets	(4 9)	(4 0)	(3.9)
Amortization of unrecognized net actuarial loss	6	2	1.7
Total	$ (9)	$	$ .5

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

	December 31,	
	2014	2015
	(In millions)	
Plans for which the ABO exceeds plan assets:		
Projected benefit obligations	$ 70 2	$ 66.6
Accumulated benefit obligations	70 2	66.6
Fair value of plan assets	53 6	47.6

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 3 , 20 4 and 20 5 are 3 8% and 4 %, 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 20 3, 20 4 and 20 5 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	2013	2014	2015
Discount rate	3 6%	4 5%	3.8%
Long term return on plan assets	0 0%	7 5%	7.5%

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,	
	2014	2015
	(In millions)	
Change in PBO:		
Balance at beginning of the year	$ 604.9	$ 659.2
Service cost	9.9	11.2
Interest cost	22.2	15.1
Participants' contributions	2.0	1.6
Actuarial loss (gain)	22.2	(10.0)
Change in currency exchange rates	(75.3)	(76.9)
Benefits paid	(26.7)	(21.3)
Balance at end of the year	$ 659.2	$ 578.9
Change in plan assets:		
Fair value at beginning of the year	$ 44[illegible].6	$ 425.5
Actual return on plan assets	40.7	10.8
Employer contributions	20.4	17.6
Participants' contributions	2.0	1.6
Change in currency exchange rates	(52.5)	(51.7)
Benefits paid	(26.7)	(21.3)
Fair value at end of year	$ 425.5	$ 382.5
Funded status	$ (233.7)	$ (196.4)
Amounts recognized in the Consolidated Balance Sheets:		
Pension asset	$	$ 1.7
Accrued pension costs:		
Current	(.6)	
Noncurrent	(233.[illegible])	(198.1)
Total	(233.7)	(196.4)
Accumulated other comprehensive loss:		
Actuarial loss	252.3	234.1
Prior service cost	2.2	1.9
Total	254.5	236.0
Total	$ 20.8	$ 39.6
ABO	$ 627.5	$ 554.4

The components of our net periodic defined benefit pension benefit cost for our foreign plans are presented in the table below In December 20 3, we amended one of Kronos' Canadian plans in which participation with respect to hourly workers was closed to new participants in December 20 3, and existing hourly plan participants will no longer accrue additional benefits after December 20 3, resulting in a $7 million curtailment charge for recognition of previously unamortized prior service cost and transition obligation and $ 2 million for special termination benefits In 20 4, we amended the other Kronos Canadian plan in which participation with respect to salaried workers was closed to new participants in December 20 4, and existing hourly plan participants will no longer accrue additional benefits after December 20 4, resulting in a nominal curtailment charge The amounts shown below for the amortization of unrecognized prior service cost, net transition obligations and actuarial losses for 20 3, 20 4 and 20 5 were recognized as components of our accumulated other comprehensive income (loss) at December 3 , 20 2, 20 3 and 20 4, respectively, net of deferred income taxes and noncontrolling interest

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Net periodic pension cost for foreign plans:			
Service cost	$ 3	$ 9 9	$ 11.2
Interest cost	2 6	22 2	15.1
Settlement gain		(3)	
Curtailment loss	7 3		
Expected return on plan assets	(8 9)	(20 6)	(17.3)
Amortization of unrecognized:			
Prior service cost		5	.4
Net transition obligations	4		
Net actuarial loss	2 5	0	13.8
Total	$ 37	$ 2 9	$ 23.2

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

	December 31,	
	2014	2015
	(In millions)	
Plans for which the ABO exceeds plan assets:		
Projected benefit obligations	$ 632 6	$ 518.1
Accumulated benefit obligations	603 4	498.7
Fair value of plan assets	40 2	321.6

A summary of our key actuarial assumptions used to determine foreign benefit obligations as of December 3 , 20 4 and 20 5 was:

Rate	December 31, 2014	2015
Discount rate	2 5%	2.6%
Increase in future compensation levels	2 6%	2.9%

A summary of our key actuarial assumptions used to determine foreign net periodic benefit cost for 20 3, 20 4 and 20 5 are as follows:

Rate	Years ended December 31, 2013	2014	2015
Discount rate	3 7%	3 8%	2.5%
Increase in future compensation levels	3 %	2 7%	2.6%
Long term return on plan assets	5 0%	5 0%	4.6%

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 and prior service cost at December 3 , 20 4 and 20 5 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 3 , 20 4 and 20 3 We expect approximately $ 2 8 million and $ 2 million of the unrecognized actuarial losses and prior service cost, respectively, will be recognized as components of our periodic defined benefit pension cost in 20 6 The table below details the changes in other comprehensive income (loss) during 20 3, 20 4 and 20 5

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Changes in plan assets and benefit obligations recognized in other comprehensive income (loss):			
Net actuarial gain (loss)	$ 9 8	$ (3 0)	$ .3
Plan curtailment	7		
Plan settlement		(2)	
Amortization of unrecognized:			
Prior service cost		5	.4
Net transition obligations	4		
Net actuarial losses	4 2	3	15.4
Total	$ 42 6	$ (0 4)	$ 16.1

At December 3 , 20 4 and 20 5, 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 Prior to his death in December 20 3, Mr Harold C 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's long term investment objective was 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) During the history of the CMRT from its inception in 988 through December 3 , 20 3, the average annual rate of return was 4% For the year ended December 3 , 20 3, the assumed long term rate of return for plan assets invested in the CMRT was 0% 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 20 3, the Contran board of directors in January 20 4 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 During 20 4, the new investment committee began a process of reallocating to current and/or new investment managers or various mutual funds and commingled funds the portion of the CMRT assets that had previously been under direct and active management by Mr Simmons The reallocation process was done prudently over a period of time, given the diverse asset composition of this portion of the portfolio, and was substantially complete at December 3 , 20 5 Concurrent with this change in investment strategy in which there is no longer a portion of the CMRT's assets under direct and active management by Mr Simmons, and considering the long term asset mix of 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 20 4 the assumed long term rate of return for plan assets invested in the CMRT was 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 or Level 2 were used to value approximately 80% and 8 % of the assets of the CMRT at December 3 , 20 4 and 20 5, respectively, as noted below The aggregate fair value of all of the CMRT assets, including funds of Conrau and its other affiliates that also invest in the CMRT, and supplemental asset mix details of the CMRT are as follows:

	December 31,	
	2014	2015
	(In m ll ions)	
CMRT asset value	$ 7 5 5	$ 648.8
CMRT fair value input:		
Level	67%	54%
Level 2	3	27
Level 3	20	19
	00%	100%
CMRT asset mix:		
Domestic equities, principally publicly traded	48%	29%
International equities, principally publicly traded	-	22
Fixed income securities, principally publicly traded	32	38
Privately managed limited partnerships	7	5
Hedge funds		5
Other, primarily cash	2	1
	00%	100%

In determining the expected long term rate of return on non US 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 38% to equity securities, 55% to fixed income securities and 7% to other investments and cash We expect the long term rate of return for such investments to average approximately 25 basis points above the applicable equity or fixed income index The Canadian assets are Level inputs because they are traded in active markets
- In Norway, we currently have a plan asset target allocation of % to equity securities, 79% to fixed income securities, 7% 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 7%, 3%, 5% and 5%, respectively The majority of Norwegian plan assets are Level inputs because they are traded in active markets; however approximately % 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 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 3 , 20 4 and 20 5 pension plan assets by asset category and 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, 2014			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Germany	$ 240 7	$	$	$ 240 7
Canada:				
Local currency equities	2 4	2 4		
Foreign currency equities	34 4	34 4		
Local currency fixed income	50 3	50 3		
Global mutual fund	0	0		
Cash and other	6	6		
Norway:				
Local currency equities	9	9		
Foreign currency equities	5	5		
Local currency fixed income	29 3	29 3		
Foreign currency fixed income	3 8	3 8		
Real estate	4 5			4 5
Cash and other	0 3	9 2		
US CMRT	53 6		53 6	
Other	22	4 3		7 8
Total	$ 479	$ 7 4	$ 53 6	$ 254

	Fair Value Measurements at December 31, 2015			
	Total	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
	(In millions)			
Germany	$ 223.1	$	$	$ 223.1
Canada:				
Local currency equities	9.6	9.6		
Foreign currency equities	23.3	23.3		
Local currency fixed income	50.6	50.6		
Global mutual fund	6.8	6.8		
Cash and other	.5	.5		
Norway:				
Local currency equities	2.0	2.0		
Foreign currency equities	3.6	3.6		
Local currency fixed income	24.5	24.5		
Foreign currency fixed income	4.7	4.7		
Real estate	4.2			4.2
Cash and other	7.9	6.7		1.2
US CMRT	47.6		47.6	
Other	21.7	14.0		7.7
Total	$ 430.1	$ 148.3	$ 47.6	$ 236.2

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

	Years ended December 31,	
	2014	2015
	(In millions)	
Fair value at beginning of year	$ 26 5	$ 254.1
Gain on assets held at end of year	24 5	6.5
Gain on assets sold during the year	3	.3
Assets purchased	6 9	13.7
Assets sold	(5 2)	(11.4)
Currency exchange rate fluctuations	(33 9)	(26.0)
Fair value at end of year	$ 254	$ 236.2

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 3 , 20 5, we expect to contribute the equivalent of approximately $ million to all of our OPEB plans during 20 6 Benefit payments to OPEB plan participants are expected to be the equivalent of:

20 6	$ million
20 7	million
20 8	0 million
20 9	0 million
2020	9 million
Next 5 years	4 2 million

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

	Years ended December 31,	
	2014	2015
	(In millions)	
Actuarial present value of accumulated OPEB obligations:		
Obligations at beginning of the year	$ 5	$ 15.4
Service cost		.1
Interest cost	6	.5
Actuarial loss (gain)	4	(.8)
Change in currency exchange rates	(6)	(1.2)
Benefits paid from employer contributions	(2)	(1.4)
Obligations at end of the year	5 4	$ 12.9
Fair value of plan assets		
Funded status	$ (5 4)	$ (12.9)
Accrued OPEB costs recognized in the Consolidated Balance Sheets:		
Current	$ (3)	$ (1.1)
Noncurrent	(4)	(11.8)
Total	(5 4)	(12.9)
Accumulated other comprehensive income (loss):		
Net actuarial losses	3 2	2.4
Prior service credit	(0 6)	(8.6)
Total	(7 4)	(6.2)
Total	$ (22 8)	$ (19.1)

The amounts shown in the table above for unrecognized actuarial losses and prior service credit at December 3 , 20 4 and 20 5 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 loss at December 3 , 20 4 and 20 5 We expect to recognize approximately $ 8 million of prior service credit and $ 2 million of unrecognized actuarial losses as components of our periodic OPEB cost in 20 6 The table below details the changes in other comprehensive income (loss) during 20 3, 20 4 and 20 5 In the fourth quarter of 20 3, we amended the benefit formula for most Canadian participants of our plans effective January , 20 4, resulting in a curtailment gain as of December 3 , 20 3 Key assumptions including the service cost and benefit duration as of December 3 , 20 4 and 20 5 now reflect these plan revisions to the benefit formula

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Changes in benefit obligations recognized in other comprehensive income (loss):			
Net actuarial gain (loss) arising during the year	$ 2 2	$ (4)	$ .8
Plan amendments/curtailment	4 5	(2)	
Amortization of unrecognized prior service credit	(2 4)	(2 0)	(1.9)
Total	$ 4 3	$ (3 6)	$ (1.1)

The components of our periodic OPEB costs are presented in the table below The amounts shown below for amortization of prior service credit and recognized actuarial losses for 20 3, 20 4 and 20 5 were recognized as components of our accumulated other comprehensive income (loss) at December 3 , 20 2, 20 3 and 20 4, respectively, net of deferred income taxes and noncontrolling interest

	Years ended December 31,		
	2013	2014	2015
		(In millions)	
Net periodic OPEB cost (credit):			
Service cost	$ 3	$	$ .1
Interest cost	7	.6	.5
Curtailment gain	(6)		
Amortization of unrecognized:			
Prior service credit	(8)	(2 0)	(1.9)
Net actuarial loss		(2)	
Total	$ (4)	$ (5)	$ (1.3)

A summary of our key actuarial assumptions used to determine the net benefit obligations as of December 3 , 20 4 and 20 5 follows:

	December 31,	
	2014	2015
Healthcare inflation:		
Initial rate	7 0%	7.0%
Ultimate rate	5 0%	5.0%
Year of ultimate rate achievement	202	2021
Discount rate	3 4%	3.6%

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 20 5 or on the accumulated OPEB obligations at December 3 , 20 5

The weighted average discount rate used in determining the net periodic OPEB cost for 20 5 was 3 4% (the rate was 4 0% in 20 4 and 3 5% in 20 3) The weighted average rate was determined using the projected benefit obligations as of the beginning of each year The impact of assumed increases in future compensation levels does not have a material effect on the net periodic OPEB cost as substantially all of such benefits relate solely to eligible retirees, for which compensation is not applicable The impact of the assumed rate of return on plan assets also does not have a material effect on the net periodic OPEB cost as there were no plan assets as of December 3 , 20 4 or 20 5

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,		
	2013	2014	2015
	(In millions)		
Pre tax income (loss):			
United States	$ (70 4)	$ 40	$ (35 3)
Non U S subsidiaries	(47 5)	7 9	(38.5)
Total	$ (2 7 9)	$ 2 0	$ (73.8)
Expected tax expense (benefit) at U S federal statutory income tax rate of 35%	$ (76 3)	$ 39 2	$ (25.8)
Non U S tax rates	4 3	(4)	.6
Incremental net benefit on earnings (losses) of non U S and U S subsidiaries	(8 5)	(2 2)	(37.6)
Valuation allowance			159.0
U S state income taxes, net	(3 4)	4	(1.3)
Adjustment to the reserve for uncertain tax positions, net	2	(3.7)	.8
Nondeductible expenses	2 9	2 8	3.0
Tax rate changes	(2)		
Other, net	(9)	(3 6)	(1.4)
Provision for income taxes (benefit)	$ (9 0)	$ 32 5	$ 97.3
Components of income tax expense (benefit):			
Currently payable (refundable):			
U S federal and state	$ 9	$ 7 4	$ 7.6
Non U S	(2)	5 2	3.3
Total	7 9	22 6	10.9
Deferred income taxes (benefit):			
U S federal and state	(57 9)	3 8	(58.5)
Non U S	(4 0)	6	144.9
Total	(98 9)	9 9	86.4
Provision for income taxes (benefit)	$ (9 0)	$ 32 5	$ 97 3
Comprehensive provision for income taxes (benefit) allocable to:			
Net income (loss)	$ (9 0)	$ 32 5	$ 97.3
Other comprehensive income (loss):			
Marketable securities	5	(3)	(4.1)
Currency translation	5 5	(6 9)	(17.3)
Pension plans	4	(33 2)	4.1
OPEB plans	0	(2)	(.4)
Interest rate swap			(1.7)
Total	$ (65 3)	$ (30)	$ 77.9

The amount shown in the above table of our income tax rate reconciliation for non U S tax rates represents the result determined by multiplying the pre tax earnings or losses of each of our non U S subsidiaries by the difference between the applicable statutory income tax rate for each non U S jurisdiction and the U S federal statutory tax rate of 35% The amount shown on such table for incremental net tax (benefit) on earnings and losses on non U S companies and U S subsidiaries includes, as applicable, (i) current income taxes (including withholding taxes, if applicable), if any, associated with any current year earnings of our Chemicals Segment's non U S subsidiaries to the extent such current year earnings were distributed to us in the current year, (ii) deferred income taxes (or deferred income tax benefits) associated with the current year change in the aggregate amount of undistributed earnings of our Chemicals Segment's Canadian subsidiary, which earnings are not subject to a permanent reinvestment plan, in an amount representing the current year change in the aggregate current income tax that would be generated (including withholding taxes, if applicable) when such aggregate undistributed earnings are distributed to us, (iii) current U S income taxes (or current income tax benefit), including U S personal holding company tax, as applicable, attributable to current year income (losses) of one of Kronos' non U S subsidiaries, which subsidiary is treated as a dual resident for U S income tax purposes, to the extent the current year income (losses) of such subsidiary is subject to U S income tax under the U S dual resident provisions of the Internal Revenue Code, and (iv) certain and deferred income taxes associated with distributions and earnings from our investment in Land Welt and BMI

The components of the net deferred tax liability at December 3 , 20 4 and 20 5 are summarized below See Note 20

	December 31,			
	2014		2015	
	Assets	Liabilities	Assets	Liabilities
	(In millions)			
Tax effect of temporary differences related to:				
Inventories	$ 5 4	$ (5 2)	$ 3.7	$ (3.7)
Marketable securities		(26 4)		(98.2)
Property and equipment		(09 2)		(96.6)
Accrued OPEB costs	4 8		4.0	
Accrued pension costs	52 0		44.0	
Currency revaluation on intercompany debt	5 6		18.6	
Accrued environmental liabilities	38 8		39.9	
Other deductible differences	34 7		45.7	
Other taxable differences		(2 6)		(21.7)
Investments in subsidiaries and affiliates		(278 7)		(238.8)
Tax on unremitted earnings of non U S subsidiaries		(2 6)		(2.0)
Tax loss and tax credit carryforwards	63 6		154.3	
Valuation allowance	( )		(168.9)	
Adjusted gross deferred tax assets (liabilities)	304 8	(543 7)	141.3	(461.0)
Netting of items by tax jurisdiction	(43 9)	43 9	(140.0)	(140.0)
Net noncurrent deferred tax asset (liability)	$ 60 9	$ (399 8)	$ 1.3	$ (321.0)

Our acquisition of an additional ownership interest in BMI in December 20 3, discussed in Note 3, increased our ownership interest in BMI from 32% to 63% As a result, effective December 3 , 20 3 we no longer account for our ownership interest in BMI by the equity method of accounting but instead BMI is a consolida ed s bsidia y P io o Decembe 3 0 3 we ecognized a defe ed income ax liabili y fo he excess of o boo basis ove o 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 20 3, 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 20 3 includes an aggregate $ 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 re measurement 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 20 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 20 and 20 2 Kronos received notices of re assessment from the Canadian federal and provincial tax authorities related to the years 2002 through 2004. We objected to the re assessments and believed the position was without merit Accordingly, we appealed 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) In 20 4, the Appeals Division of the Canadian Revenue Authority ruled in our favor and reversed in their entirety such notices of re assessment As a result, we recognized a non cash income tax benefit of $3 0 million related to the release of a portion of our reserve for uncertain tax positions in 20 4 related to the completion of this Canadian income tax audit In addition, the related letters of credit have been cancelled Also during 20 4, we recognized a non cash income tax benefit of $3 million related to the release of a portion of our reserve for uncertain tax positions in conjunction with the completion of an audit of our U S income tax return for 2009 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 20 3, 20 4 and 20 5:

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Unrecognized tax benefits:			
Amount beginning of year	$ 33 4	$ 47 9	$ 30.1
Net increase (decrease):			
Tax positions taken in prior periods	5	(9 6)	(.4)
Tax positions taken in current period	.3	3 6	6.4
Lapse due to applicable statute of limitations	3 4	(7)	(6.0)
Acquisition of BMI and LandWell			
Changes in currency exchange rates	(8)	( )	(1 3)
Amount at end of year	$ 47 9	$ 30.	$ 28.8

If our uncertain tax positions were recognized, a benefit of $29 2 million, $24 2 million and $23 4 million at December 3 , 20 3, 20 4 and 0 espec ively wo ld affec o effec ive income ax a e We c en ly es ima e ha o d ecognized ax benefi s will dec ease by app oxima ely 6 6 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 20 2 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: 2006 for Norway; 20 0 for Canada; 20 for Germany; and 20 2 for Belgium

We accrue interest and penalties on our uncertain tax positions as a component of our provision for income taxes We accrued interest and penalties of $ 3 million during 20 3 and $ 2 million during 20 4 and $ 3 million during 20 5, and at December 3 , 20 4 and 20 5 we had $4 million and $4 2 million, respectively, accrued for interest and an immaterial amount accrued for penalties for our uncertain tax positions

Our Chemicals Segment has substantial net operating loss ("NOL") carryforwards in Germany (the equivalent of $683 million and $96 million for German corporate and trade tax purposes, respectively, at December 3 , 20 5) and in Belgium (the equivalent of $86 million for Belgian corporate tax purposes at December 3 , 20 5), all of which have an indefinite carryforward period As a result, we have net deferred income tax assets recognized with respect to these two jurisdictions, primarily related to these NOL carryforwards The German corporate tax is similar to the U S federal income tax, and the German trade tax is similar to the U S state income tax Prior to June 30, 20 5, and using all available evidence, we had concluded no deferred income tax asset valuation allowance was required to be recognized with respect to these net deferred income tax assets under the more likely than not recognition criteria, primarily because (i) the carryforwards have an indefinite carryforward period, (ii) we utilized a portion of such carryforwards during the most recent three year period, and (iii) we expected to utilize the remainder of the carryforwards over the long term We had also previously indicated that facts and circumstances could change, which might in the future result in the recognition of a valuation allowance against some or all of such deferred income tax assets However, as of June 30, 20 5, and given our operating results during the second quarter of 20 5 and our expectations at that time for our operating results for the remainder of

20 5, we did not have sufficient positive evidence to overcome the significant negative evidence of having cumulative losses in the most recent twelve consecutive quarters in both our German and Belgian jurisdictions at June 30, 20 5 (even considering that the carryforward period of our German and Belgium NOL carryforwards is indefinite, one piece of positive evidence) Accordingly, at June 30, 20 5, we concluded that we were required to recognize a non cash deferred income tax asset valuation allowance under the more likely than not recognition criteria with respect to our German and Belgian net deferred income tax assets Such valuation allowance aggregated $ 50 3 million at June 30, 20 5 We recognized an additional $8 7 million non cash deferred income tax valuation allowance under the more likely than not recognition criteria during the third and fourth quarters of 20 5, due to losses recognized by Kronos' German and Belgium operations during such period In addition to the aggregate $ 59 0 million increase in the deferred income tax asset valuation allowance recognized as part of the provision for income taxes in 20 5, the deferred income tax asset valuation allowance also increased by an aggregate of $9 8 million in 20 5 due to amounts recognized in other comprehensive loss

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 such recognition of deferred income taxes is not available to us There is a maximum amount (or cap) of such deferred income taxes we are required to recognize with respect to our direct investment in Kronos, and we previously reached such maximum amount in the fourth quarter of 20 0 Since that time and through March 3 , 20 5, we were not required to recognize any additional deferred income taxes with respect to our direct investment in Kronos because the deferred income taxes associated with the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock continued to be above such cap However, at June 30, 20 5, the deferred income taxes associated with the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock was, for the first time since the fourth quarter of 20 0, below such cap, in large part due to the net loss reported by Kronos in the second quarter of 20 5 Accordingly, our provision for income taxes in 20 5 includes an aggregate non cash income tax benefit of $29 3 million, recognized in the second, third and fourth quarters of, 20 5, for the reduction in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock, to the extent such reduction related to our equity in Kronos' net loss Such amount is included in the above table of our income tax rate reconciliation for incremental net benefit on earnings and losses on non U S and U S subsidiaries (in addition to the other items indicated above) A portion of such reduction also related to our equity in Kronos' other comprehensive income (loss) items, and the amounts shown in the table above for income tax expense (benefit) allocated to other comprehensive income (loss) includes amounts related to our equity in Kronos' other comprehensive income (loss) items

Note 13 Noncontrolling interest in subsidiaries:

	December 31, 2014	December 31, 2015
	(In millions)	
Noncontrolling interest in net assets:		
Kronos Worldwide	$ 2 0	$ 147.9
NL Industries	54 4	39.5
CompX International	4 4	15.3
BMI	3 7	31.6
LandWell	24 8	23.9
Total	$ 336 3	$ 258.2

	Years ended December 31, 2013	2014	2015
	(In millions)		
Noncontrolling interest in net income (loss) of subsidiaries:			
Kronos Worldwide	$ (20 3)	$ 9 2	$ (34.3)
NL Industries	(9 4)	4 8	(4.0)
CompX International	8		1.2
BMI		.3	.1
LandWell		.3	(.5)
Total	$ (28 9)	$ 25 7	$ (37.5)

Note 14 Valhi stockholders' equity:

	Shares of common stock		
	Issued	Treasury	Outstanding
	(In millions)		
Balance at December 31, 2013, 2014 and 2015	**355.2**	**(13.2)**	**342.0**

Valhi authorized shares Prior to 20 3, we amended our certificate of incorporation to increase the authorized number of shares of our common stock to 500 million

We issued a nominal number of shares of Valhi common stock during 20 3, 20 4 and 20 5, associated with annual stock awards to members of our board of directors

Valhi share repurchases and cancellations. Prior to 20 3, our board of directors authorized the repurchase of up to 0 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 20 3, 20 4 or 20 5

Treasury stock. The treasury stock we reported for financial reporting purposes at December 3 , 20 3, 20 4 and 20 5 represents our proportional interest in the shares of our common stock held by NL and Kronos NL held approximately 4 4 million shares of our common stock at December 3 , 20 4 and 20 5 At December 3 , 20 4 and 20 5 Kronos held an aggregate of 7 million shares of our common stock Under Delaware Corporation Law, 00% (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 $ 33,466 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 $ 0 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 $ 33,466 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 3 , 20 5, we have not declared any dividends on the Series A Preferred Stock since its issuance prior to 20 3

Valhi long term incentive compensation plan. Prior to 20 3, our board of directors adopted a plan that provides for the award of stock to our board of directors, and up to a maximum of 200,000 shares could be awarded Under the plan, we awarded 5,000 shares in 20 3; 2,000 shares in 20 4 and 0,500 shares in 20 5, and at December 3 , 20 5 66,500 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 3 , 20 5, Kronos and NL each had 77,000 shares of common stock available for future grant under its respective plan and CompX had 8 ,000 shares available for award

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 20 3, 20 4 and 20 5 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,		
	2013	2014	2015
		(In millions)	
Accumulated other comprehensive income (loss) (net of tax and noncontrolling interest):			
Marketable securities:			
Balance at beginning of year	$ 2	$ 2 8	$ 1.6
Other comprehensive income (loss):			
Unrealized losses arising during the year		(0)	
Less reclassification adjustments for amounts included in realized loss (gain)	7	(2)	
Balance at end of year	$ 2 8	$ 6	$ 1.6
Interest rate swap:			
Balance at beginning of year	$	$	$
Other comprehensive loss:			
Unrealized losses during the year			(1.7)
Less reclassification adjustments for amounts included in interest expense			.4
Balance at end of year	$	$	$ (1.3)
Currency translation:			
Balance at beginning of year	$ 53 3	$ 59 2	$ (22.6)
Other comprehensive income (loss) arising during the year	5 9	(8 8)	(55.5)
Balance at end of year	$ 59 2	$ (22 6)	$ (78.1)
Defined benefit pension plans:			
Balance at beginning of year	$ (0 5)	$ (76 5)	$ (132.0)
Other comprehensive income (loss):			
Amortization of prior service cost and net losses included in net periodic pension cost	8 4	6 3	6.7
Net actuarial gain (loss) arising during the year	2 6	(6 7)	2.3
Plan curtailment	4 0	( )	
Balance at end of year	$ (76 5)	$ (32 0)	$ (123.0)
OPEB plans:			
Balance at beginning of year	$ 4	$ 6 5	$ 4.4
Other comprehensive loss:			
Amortization of prior service credit and net losses included in net periodic OPEB cost	(4)	(3)	(1.0)
Net actuarial gain (loss) arising during the year	3	(8)	.4
Plan amendment	2 5		
Balance at end of year	$ 6 5	$ 4 4	$ 3.8
Total accumulated other comprehensive income (loss):			
Balance at beginning of year	$ (42 0)	$ (8 0)	$ (148.6)
Other comprehensive income (loss)	34 0	(40 6)	(48.4)
Balance at end of year	$ (8 0)	$ (48 6)	$ (197.0)

See Note for amounts related to our defined benefit pension plans and OPEB plans

Note 15 Other income, net:

	Years ended December 31,		
	2013	2014	2015
	(In millions)		
Securities earnings:			
Dividends and interest	$ 26.4	$ 26.6	$ 26.5
Securities transactions, net	.2	.3	-
Total	26.6	26.9	26.5
Equity in earnings of investees	.5	-	-
Insurance recoveries	9.4	0.4	3.7
Currency transactions, net	(3.8)	4.0	(.1)
Disposal of property and equipment, net	(.5)	(.9)	(.8)
Gain on bargain purchase and remeasurement of our existing investment in acquiree	54.6	-	-
Other, net	.2	.6	2.7
Total	$ 88.0	$ 42.0	$ 32.0

Dividends and interest income includes distributions from The Amalgamated Sugar Company LLC of $25.4 million in each of 2013, 2014 and 2015 (see Note 4).

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. 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. Substantially all of $ 0.4 million in the insurance recoveries we recognized in 2014 relate to a settlement NL reached with one of its insurance carriers in September 2014 in which it agreed to reimburse NL for a portion of its past litigation defense costs. Any additional insurance recoveries would be recognized when the receipt is probable and the amount is determinable. See Note 17.

Equity in earnings of investees 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. Simmons and Ms. Connelly. 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 may 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 See Note 9 for more information on the Valhi and Kronos credit facilities with Contran We paid Contran $ 9 0 million, $ 0 million and $ 0 3 million in interest on borrowings under credit facilities in 20 3, 20 4 and 20 5, respectively

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 $ 7 million promissory note payable discussed in Notes 3 and 9 and (iii) Tremont's $8 8 million ($ million face value) deferred payment obligation discussed in Notes 3 and 0 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 $36 million in 20 3, $33 4 million in 20 4 and $35 8 million in 20 5 These agreements are renewed annually, and we expect to pay a net amount of $36 5 million under the ISAs during 20 6

We had an aggregate 2 0 million shares at December 3 , 20 4 and 3 2 million shares at December 3 , 20 5 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 We received $ 8 million in 20 3, $ 9 million in 20 4 and $ 8 million in 20 5 from Contran for this pledge

Our subsidiaries 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 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) Consistent with insurance industry practices, Tall Pines and EWI receive commissions from insurance and reinsurance underwriters and/or assess fees for the policies that they provide or broker to us We received cash payments for insurance premiums from Contran and certain other affiliates not members of our consolidated financial reporting group of $5 7 million in each of 20 3 and 20 4 and $5 4 million in 20 5 These amounts also include payments to insurers or reinsurers through EWI for the reimbursement of claims within our applicable deductible or retention ranges that such insurers or reinsurers paid to third parties on our behalf, as well as amounts for claims and risk management services and various other third party fees and expenses incurred by the program We expect these relationships with Tall Pines and EWI will continue in 20 6

With respect to certain of such jointly owned 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, Contran and certain of its subsidiaries and affiliates, including us, 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 for any uninsured loss

Contran and certain of its subsidiaries, including us, participate in a combined information technology data recovery program that Contran provides from a data recovery center that it established Pursuant to the program, Contran and certain of its subsidiaries, including us, as a group share information technology data recovery services The program apportions its costs among the participating companies We paid Contran $ 86,000 in 20 3, $243,000 in 20 4 and $298,000 in 20 5 for such services We expect that this relationship with Contran will continue in 20 6

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 7 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 Upon completing the pending sale of WCS to Rockwell discussed in Note 3, we and our affiliates would no longer be required to provide or assist with such financial assurance.

- During 20 3, 20 4 and 20 5, a subsidiary of Contran guaranteed certain of WCS' specified decommissioning obligations as it relates to its LLRW treatment and storage facility and RCRA permits, currently estimated at $3 9 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 20 3, 20 4 and 20 5, 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 3 , 20 5, the amount of such LOC was $6 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 reimbursed Contran for costs related to the LOC of $ million in each of 20 3, 20 4 and 20 5
- Prior to 20 3, we, certain of our subsidiaries, Contran and certain subsidiaries of Contran guaranteed WCS' obligations under the surety bond (currently valued at $87 9 million) discussed in Note 7 The obligations would arise upon our failure to make the required quarterly payments into the surety bond trust discussed in Note 7 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, 2014	December 31, 2015
	(In millions)	
Current receivables from affiliates:		
Louisiana Pigment Company, L P	$ 3 0	$
Contran:		
Trade items	2	.2
Income taxes	9 2	7.6
Other	5	2.5
Total	$ 23 9	$ 10.3
Current payables to affiliates:		
Louisiana Pigment Company, L P	$ 9 9	$ 19.4
Contran trade items	26	26.1
Total	$ 46 0	$ 45.5
Payables to affiliate included in long term debt:		
Valhi Contran credit facility	$ 223 7	$ 263.8

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 $224 5 million in 20 3, $ 93 million in 20 4 and $ 76 5 million in 20 5 Sales of feedstock to LPC were $ 4 million in 20 3, $98 4 million in 20 4 and $80 6 million in 20 5 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 20 2 and prior years Any amounts WCS owes to Contran and any other affiliates would be contributed to WCS immediately prior to the completion of the pending sale of WCS to Rockwell and included in the calculation of gain or loss on the sale discussed in Note 3

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 or a trial verdict in favor of either the defendants or the plaintiffs

NL believes that these actions are without merit, and NL intends to continue to deny all allegations of wrongdoing and liability and to defend against all actions vigorously NL does not believe it is probable that it has incurred any liability with respect to all of the lead pigment litigation cases to which NL is 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, 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 00 cases over a twenty year period for which NL was previously a party and for which NL has been dismissed without any finding of liability

Accordingly, neither we nor NL have accrued any amounts for any of the pending lead pigment and lead based paint litigation cases filed by or on behalf of states, counties, cities or their public housing authorities and school districts, or those asserted as class actions 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 one of these lead pigment cases, in April 2000 NL was 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 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 would 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 20 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 jurisdictions and sought its abatement In July and August 20 3, the case was tried In January 20 4, the Judge issued a judgment finding NL, The Sherwin Williams Company and ConAgra Grocery Products Company jointly and severally liable for the abatement of lead paint in pre 980 homes, and ordered the defendants to pay an aggregate $ 5 billion to the people of the State of California to fund such abatement In February 20 4, NL filed a motion for a new trial, and in March 20 4 the court denied the motion Subsequently in March 20 4, NL filed a notice of appeal with the Sixth District Court of Appeal for the State of California and the appeal is proceeding with the appellate court NL believes that this judgment is inconsistent with California law and is unsupported by the evidence, and NL will defend vigorously against all claims

The Santa Clara case is unusual 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, (ii) the uniqueness of the Santa Clara verdict (i e no final, non appealable verdicts have ever been rendered against NL, or any of the other former lead pigment manufacturers, based on the public nuisance theory of liability or otherwise), and (iii) 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 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

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, 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 occasionally named as a party in 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 (including costs associated with damages for personal injury or property damage and/or damages for injury to natural resources) 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 3 , 20 4 and 20 5, receivables for recoveries were 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

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,		
	2013	2014	2015
		(In millions)	
Balance at the beginning of the year	$ 50 2	$ 22 7	$ 118.5
Additions charged to expense, net	69 0	6 6	5.7
Acquired	7 0		
Payments, net	(3 4)	(3 0)	(3 5)
Changes in currency exchange rates and other	( )	2 2	(.3)
Balance at the end of the year	$ 22 7	$ 8 5	$ 120.4
Amounts recognized in our Consolidated Balance Sheet at the end of the year:			
Current liabilities	$ 9	$ 0 2	$ 11.7
Noncurrent liabilities	3 6	08 3	108.7
Total	$ 22 7	$ 8 5	$ 120.4

NL 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 3 , 20 5, NL had accrued approximately $ 3 million related to approximately 42 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 $ 66 million, including the amount currently accrued

NL believes that it is not reasonably possible to estimate the range of costs for certain sites At December 3 , 20 5, 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

WCS Effective December 20 5, WCS entered an Agreed Order with the TCEQ with regard to the disposition of certain U S Department of Energy ("DOE") waste currently stored at the WCS facility WCS entered into the Agreed Order as the licensee of the storage facility, and DOE entered into a similar order with the TCEQ as the owner of the waste WCS asserts that the alleged violations set forth in the orders are due to the acts and omissions of DOE and its contractor WCS expects to work with TCEQ and DOE to develop a compliance plan regarding the stored waste While the cost of the compliance plan is not currently estimable, the amount of such compliance costs could be material On October 2 , 20 5 the U S Nuclear Regulatory Commission ("NRC") Office of Investigations commenced an investigation of WCS's handling of the DOE waste described above WCS is cooperating fully, and no formal demands or claims have been asserted by the NRC WCS believes the DOE or its contractor is required to reimburse WCS for its cost to comply with the Agreed Order and the NRC investigation under the terms of the storage contract and pursuant to law, and as such we believe the cost of compliance with the Agreed Order and the NRC investigation should not have a material effect on our consolidated financial condition, results of operations or liquidity

Other We have also accrued approximately $7 4 million at December 3 , 20 5 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 three 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 January 20 4, NL was 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 4/650 03) 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 20 4, NL was 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 : 4 CV 259924) In January 20 5, an Order of Deposit Under CCP § 572 was entered by the trial court

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 our 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 02 of these types of cases pending, involving a total of approximately 588 plaintiffs In addition, the claims of approximately 8,692 plaintiffs have been administratively dismissed or placed on the inactive docket in Ohio 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 20 3 Kronos entered into a settlement agreement with the class plaintiffs in the consolidated complaint, 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 : 0 cv 003 8 RDB) Without admitting any fault or wrongdoing, Kronos agreed to pay an aggregate of $35 million (which was paid in 20 4), and Kronos and the other defendants have been dismissed with prejudice from this matter Selling, general and administrative expenses in 20 3 includes a $35 million charge related to this settlement

In March 20 3, 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: 3 cv 0 80 SI) The defendants include us, E I Du Pont de Nemours & Company, Huntsman International LLC and Millennium Inorganic Chemicals, Inc As amended by plaintiffs' second amended complaint, 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, Kansas, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Mexico, New York, North Carolina, Oregon, South Carolina, Tennessee and Wisconsin that indirectly purchased titanium dioxide from one or more of the defendants on or after March , 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 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 Based on our quarterly status evaluation of this case, we have determined that it is not reasonably possible that a loss has been incurred in this case

In November 20 3, Kronos was 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 : 3 cv 032 4 RHK L B) 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) The 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 : 0 cv 003 8 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 In October 20 4, the court granted our motion to transfer, and the case is now proceeding in the trial court in the United States District Court for the Southern District of Texas, Case No 4: 4 cv 0 30 The trial in this case is currently set to commence in September 20 6 We believe the action is without merit, will deny all allegations of wrongdoing and liability and intend to defend against the action vigorously Based on our quarterly status evaluation of the case, we have determined that while it is reasonably possible (but not probable) that a loss has been incurred in this case, we do not believe the amount of such loss will be material to our consolidated financial condition, results of operations or liquidity

WCS Previously, the Lone Star Chapter of the Sierra Club filed various lawsuits in Texas District Court against the Texas Commission on Environmental Quality ("TCEQ") WCS intervened in these lawsuits These lawsuits challenged WCS' 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 remained in effect pending resolution of the appeal On April 4, 20 4, the Third District of the Texas Court of Appeals in Austin upheld the District Court's ruling in favor of the TCEQ and WCS On December 30, 20 4 the Third District of the Texas Court of Appeals issued a new opinion again upholding the District Court's ruling in favor of the TCEQ and WCS On February 3, 20 5, the Third District of the Texas Court of Appeals denied the Sierra Club's motion for rehearing en banc Sierra Club petitioned for discretionary relief from the Texas Supreme Court on March 30, 20 5 In October 20 5 the Texas Supreme Court denied Sierra Club's petition All appeals have been exhausted and the matter is concluded

In May 20 2, the same District Court subsequently held that TCEQ erred in denying the 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 Because of the appeal, the District Court's order was suspended WCS' low level radioactive waste disposal license remained in effect pending resolution of the appeal On April 8, 20 4, the Third District of the Texas Court of Appeals in Austin reversed the District Court's ruling and rendered judgment in favor of TCEQ and WCS On December 30, 20 4, the Third District of the Texas Court of Appeals issued a new opinion, again reversing the District Court's ruling and rendering judgment in favor of the TCEQ and WCS On February 7, 20 5, the Third District of the Texas Court of Appeals denied the Sierra Club's motion for rehearing en banc Sierra Club petitioned for discretionary relief from the Texas Supreme Court on April 3, 20 5 In October 20 5, the Texas Supreme Court denied Sierra Club's petition All appeals have been exhausted and the matter is concluded

On February 0, 20 5, WCS competitor EnergySolutions LLC ("EnergySolutions") threatened to bring a civil action against WCS related to WCS's decision to not enter into a contract with EnergySolutions to dispose of low level radioactive waste ("LLRW") and other matters On February 8, 20 5, WCS filed suit against EnergySolutions in the 09 h District Court of Andrews County, Texas (Cause No 9,785), seeking a declaratory judgment that WCS has no obligation to contract with EnergySolutions and that WCS has the right to inform its current and potential customers that it will not enter into that contract On March 3, 20 5, EnergySolutions removed the WCS action to federal court and asserted a counterclaim against WCS under Section 2 of the Sherman Antitrust Act alleging anticompetitive conduct in the LLRW disposal market This case is now captioned Energy Solutions, LLC, Plaintiff and Counter Defendant vs Waste Control Specialists LLC, Defendant and Counter Plaintiff (United States District Court for the Western District of Texas, Civil Action No 7: 5 CV 00034) WCS moved to remand the WCS declaratory judgment action to state court because EnergySolutions improperly removed it, and WCS moved to dismiss EnergySolutions' counterclaim because it fails to state a claim upon which relief can be granted On August 9, 20 5, the court denied WCS' motion for remand In connection with the proposed sale of WCS to Rockwell discussed in Note 3, on November 20, 20 5 the case was dismissed by joint request

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 90% of our Chemicals Segment's sales in each of 20 3, 20 4 and 20 5 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 34% of our Chemicals Segment's net sales in 20 3 and 20 5 and 35% in 20 4 In each of 20 3, 20 4 and 20 5, one customer, Behr Process Corporation, accounted for approximately 0% 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

	2013	2014	2015
Europe	49%	50%	51%
North America	33%	33%	29%

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 Segment accounted for approximately 42% of sales in 20 3, 47% in 20 4, and 48% in 20 5 United States Postal Service, a customer of the security products reporting unit, accounted for approximately 3% of the Component Products Segment's total sales in both 20 4 and 20 5 Harley Davidson, also a customer of the security products reporting unit, accounted for approximately 2% in each of 20 3, 20 4 and 20 5

Our Waste Management Segment's revenues consist of storage and disposal fees at our facility located in Andrews County, Texas During 20 3 we had sales to three customers that each exceeded 0% of our Waste Management Segment's net sales: Tennessee Valley Authority (30%), Studsvik, Inc. (5%) and the DOE (0%) During 20 4 we had sales to two customers that each exceed 0% of our Waste Management Segment's total sales; Zion Solutions (8%), and Sacramento Municipal Utility District (23%) During 20 5 we had sales to five customers that each exceed 0% of our Waste Management Segment's total sales: Exelon Generation (9%), U S Department of Energy (6%), Nuclear Waste Partnership (2%), Arizona Public Service (2%), and Zion Solutions (%)

Our Real Estate Management and Development Segment's revenues are land sales income and water and electric delivery fees During 20 4 we had sales to four customers that each exceeded 0% of our Real Estate Management and Development Segment's net sales: Greystone Nevada (23%), Woodside Homes of Nevada (25%), and Richmond Homes of Nevada (20%) all relate to land sales; the City of Henderson (2%) relates to our water delivery services During 20 5 we had sales to four customers that each exceeded 0% of our Real Estate Management and Development Segment's net sales: Richmond Homes of Nevada (27%), LV East Gibson, LLC (7%), and Prologis, L P (%) are all relate to land sales; the City of Henderson (5%) relates to our water delivery services

Long-term contracts Our Chemicals Segment has long term supply contracts that provide for certain of our TiO_2 feedstock requirements through 20 9 The agreements require Kronos to purchase certain minimum quantities of feedstock with minimum purchase commitments aggregating approximately $868 million over the life of the contracts in years subsequent to December 3 , 20 5 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 $ 47 million at December 3 , 20 5

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 20 7 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 approximated $ 5.8 million in 20 3, $ 6.6 million in 20 4 and $ 6 million in 20 5. At December 3 , 20 5, 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)
20 6	$ 11.4
20 7	8.2
20 7	5.1
20 8	4.4
20 9	3.6
2020 and thereafter	23.6
Total ( )	$ 56.3

( ) Approximately $ 4 million of the $56.3 million aggregate future minimum rental commitments at December 3 , 20 5 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 3 , 20 5. 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 20 3, 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 are a party to a tax sharing agreement with Contran providing for the allocation of tax liabilities and tax payments as described in Note . 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 sharing agreement.

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 6. 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 was $32.2 million in December 20 3. 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 20 . In April 20 4, WCS obtained a further increase in the surety bond from $32.2 million to $85.3 million. As part of the increase in the surety bond, in April 20 4, WCS paid an aggregate of $2.0 million into the first collateral trust. Similar to the $32.2 million surety bond, WCS is still required to make quarterly cash payments into the first collateral trust, but at a rate sufficient such that the aggregate amount of such payments funded into the collateral trust would equal 50% of the total value of the new bond by April 202 . Such new quarterly cash payments are equal to approximately $ 3 million and began in the third quarter of 20 4. At December 3 , 20 5, we had made payments totaling $ 6 million into this collateral trust (including a one time $2.0 million payment made in April 20 4), which is reflected as part of our noncurrent restricted cash on our Consolidated Balance Sheet.

- As additional surety for its LLRW disposal facility, WCS had also been required to make cash payments into a second collateral trust annually in November of each of 20 2 through 20 6, and such payments aggregated $ 8 0 million at March 3 , 20 4 In April 20 4, concurrent with WCS obtaining an increase in the surety bond from $32 2 million to $85 3 million as discussed above, in return the Texas government agency agreed to the release of the $ 8 0 million which WCS had previously paid into the second collateral trust. WCS received such $ 8 0 million in April 20 4
- Valhi previously pledged certain of our marketable securities as collateral for the state of Texas related to specified decommissioning obligations associated with WCS' LLRW disposal facilities In September 20 4, concurrent with a reduction in the amount of required financial assurance, the state of Texas released these marketable securities to us and they are no longer pledged as collateral to the state of Texas

Owner Participation Agreement of Real Estate Management and Development Segment Under an Owner Participation Agreement ("OPA") entered into by LandWell with the Redevelopment Agency of the City of Henderson, Nevada, if LandWell develops certain real property for commercial and residential purposes in a master planned community in Henderson, Nevada, the cost of certain public infrastructure may be reimbursed to us through tax increment The maximum reimbursement under the OPA is $209 million, and is subject to, among other things, completing construction of approved qualifying public infrastructure, transferring title of such infrastructure to the City of Henderson, receiving approval from the Redevelopment Agency of the funds expended to be eligible for tax increment reimbursement and the existence of a sufficient property tax valuation base and property tax rates in order to generate tax increment reimbursement funds We are entitled to receive 75% of the tax increment generated by the master planned community through 2036, subject to the qualifications and limitations indicated above Due to the significant uncertainty of the timing and amount of any of such potential tax increment reimbursements, we recognize any such tax increment reimbursements only when received The amount of such tax increments received in 20 4 and 20 5 were not material

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 3 , 20 4 and 20 5:

	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, 2014:				
Marketable securities:				
Current	$ 2 7	$ 7	$ 0	$
Noncurrent	255 6	2 5	3	250 0
Currency forward contracts	(4 2)	(4 2)		
December 31, 2015:				
Marketable securities:				
Current	$ 2.0	$	$ 2.0	$
Noncurrent	254.9	3.5	1.4	250.0
Currency forward contracts	(1.2)	(1.2)		
Interest rate swap	(3.5)		(3.5)	

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 Derivatives that we use are primarily currency forward contracts and interest rate swaps 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 inputs based on the currency spot forward rates quoted by banks or currency dealers

At December 3 , 20 5, Kronos had currency forward contracts to exchange an aggregate of $ 7 9 million for an equivalent value of Canadian dollars at an exchange rate of Cdn $ 29 per U S dollar These contracts with Wells Fargo Bank, N A mature from January through July 20 6 at a rate of $2 6 million per month

The estimated fair value of such currency forward contracts at December 3 , 20 5 was a $ 2 million net liability, which is recognized as part of accounts payable and accrued liabilities in our Consolidated Balance Sheet with a corresponding $ 2 million currency transaction loss in our Consolidated Statement of Operations, (in 20 4 we had a $4 2 million net liability of which $4 2 million is recognized as part of accounts payable and accrued liabilities in our Consolidated Balance Sheet with a corresponding $4 2 million currency transaction loss 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 20 3, 20 4 and 20 5

Interest rate swap contract As part of our interest rate risk management strategy, in August 20 5 Kronos entered into a pay fixed/receive variable interest rate swap contract with Wells Fargo Bank, N A to minimize its exposure to volatility in LIBOR as it relates to Kronos' forecasted outstanding variable rate indebtedness Under this interest rate swap, Kronos will pay a fixed rate of 2 0 6% per annum, payable quarterly, and receive a variable rate of three month LIBOR (subject to a 00% floor), also payable quarterly, in each case based on the notional amount of the swap then outstanding The effective date of the swap contract was September 30, 20 5 The notional amount of the swap started at $344 75 million and declines by $875,000 each quarter beginning December 3 , 20 5, with a final maturity of the swap contract in February 2020 This swap contract has been designated as a cash flow hedge and qualified as an effective hedge at inception under ASC Topic 8 5 The effective portion of changes in fair value on this interest rate swap is recorded as a component of other comprehensive income (loss), net of deferred income taxes and noncontrolling interest Commencing in the fourth quarter of 20 5, as interest expense accrues on LIBOR based variable rate debt, we classify the amount we pay under the pay fixed leg of the swap and the amount we receive under the receive variable leg of the swap as part of interest expense, with the net effect that the amount of interest expense we recognize on our LIBOR based variable rate debt each quarter, as it relates to the notional amount of the swap outstanding each quarter, will be based on a fixed rate of 2 0 6% per annum in lieu of the level of LIBOR prevailing during the quarter The amount of hedge ineffectiveness, if any, related to the swap will be recorded in earnings (also as part of interest expense) As of December 3 , 20 5, there were no gains or losses recognized in earnings in the current period representing hedge ineffectiveness with respect to the interest rate swap

During the year ended December 3 , 20 5, the pretax amount recognized in other comprehensive income (loss) related to the interest rate swap contract was a $4 4 million loss During the same period, $ 9 million was reclassified from accumulated other comprehensive income (loss) into earnings During the next twelve months the amount of the December 3 , 20 5 accumulated other comprehensive income balance that is expected to be reclassified to earnings is $3 5 million pre tax

The fair value of the interest rate swap contract at December 3 , 20 5 was a liability of $3 5 million and is reflected in the Consolidated Balance Sheet as part of accounts payable and accrued liabilities of $3 3 million and other noncurrent liabilities of $ 2 million See Note 0 The fair value of the interest rate swap was estimated by a third party using inputs that are observable or that can be corroborated by observable market data such as interest rate yield curves, and therefore, is classified within Level 2 of the valuation hierarchy

The following table presents the financial instruments that are not carried at fair value but which require fair value disclosure as of December 3 , 20 4 and 20 5:

	December 31, 2014		December 31, 2015	
	Carrying amount	Fair value	Carrying amount	Fair value
	(In millions)			
Cash, cash equivalents and restricted cash equivalents	$ 280 3	$ 280 3	$ 229.1	$ 229.1
Deferred payment obligation	8 5	8 5	8.8	8.8
Long term debt (excluding capitalized leases):				
Kronos term loan	$ 340 9	$ 34 5	$ 338.0	$ 309.5
Snake River Sugar Company fixed rate loans	250 0	250 0	250.0	250.0
WCS fixed rate debt	67	67	65.6	65.6
Valhi credit facility with Contran	223 7	223 7	263.8	263.8
Tremont promissory note payable	7 4	7 4	17.1	17.1
BMI bank note payable	0 2	0 3	9.3	9.4
LandWell note payable to the City of Henderson	3	3	3.1	3.1

At December 3 , 20 5, the estimated market price of Kronos' term loan was $900 per $,000 principal amount At December 3 , 20 4, the estimated market price of Kronos' term loan was $983 per $,000 principal amount The fair value of Kronos' 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 trades 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 - Restructuring Costs

In the second quarter of 20 5, our Chemicals Segment initiated a restructuring plan designed to improve its long term cost structure A portion of such expected cost savings is planned to occur through workforce reductions During the second, third and fourth quarters of 20 5 Kronos implemented certain voluntary and involuntary workforce reductions at certain of its facilities impacting approximately 60 individuals A substantial portion of such workforce reductions were accomplished through voluntary programs, for which eligible workforce reduction costs are recognized at the time both the employee and employer are irrevocably committed to the terms of the separation For involuntary programs, eligible costs are recognized when management approves the separation program, the affected employees are properly notified and the costs are estimable To the extent there is a statutorily mandated notice period and the affected employee is not required to provide services to us during such notice period, severance and all wages during such notice period are accrued at the time of separation To the extent the affected employee is required to provide services to us during all or a portion of such notice period, the severance (and if applicable notice period wages for any period beyond the time the affected employee is required to provide future services to us) is accrued ratably over the period in which services will be provided As of December 3 , 20 5, we have recognized an aggregate $2 7 million charge for such workforce reductions Kronos had implemented through that date (substantially all of which was recognized in the second quarter of 20 5), $ 0 8 million of which is classified in cost of sales and $ 0 9 million of which is classified in selling, general and administrative expense For workforce reductions implemented through December 3 , 20 5, we do not expect to accrue any further material amounts associated with the affected individuals who are providing service to us past December 3 , 20 5 All accrued severance costs at December 3 , 20 5 are expected to be paid through the third quarter of 20 8

A summary of the activity in our accrued workforce reduction costs during 20 5 is shown in the table below:

	Amount (in millions)
Accrued workforce reduction costs as of January , 20 5	$
Workforce reduction costs accrued	2 7
Workforce reduction costs paid	(3 9)
Currency translation adjustments, net	(2)
Accrued workforce reduction costs at December 3 , 20 5	$ 5 6
Amounts recognized in our Consolidated Balance Sheet at the end of the period:	
Current liability	$ 5 3
Noncurrent liability	3
	$ 5 6

Note 20 Recent accounting pronouncements:

Adopted

In April 20 5, the FASB issued ASU 20 5 03, *Interest Imputation of Interest (Subtopic 835 30): Simplifying the Presentation of Debt Issuance Costs*, which requires unamortized debt issuance costs (or deferred financing costs) to be presented in the balance sheet as a direct deduction from the carrying value of the associated debt liability, consistent with the presentation of a debt discount Previously, such unamortized debt issue costs were generally presented as a noncurrent asset ASU 20 5 5, issued by the FASB in August 20 5, clarified that the scope of ASU 20 5 03 does not include deferred financing costs related to revolving credit facilities The guidance in the new standard is limited to the presentation of debt issuance costs within its scope and does not affect the recognition, measurement or amortization of debt issuance costs The standard is effective for financial statements issued for fiscal years beginning after December 5, 20 5, and interim periods within those fiscal years and is applied on a retrospective basis Early adoption is permitted, and we have adopted this ASU in this Annual Report As a result of adopting this ASU, deferred financing costs of $5 million at December 3 , 20 4, previously recognized as an asset, are now classified as a direct deduction from the carrying value of such term loan in our Consolidated Balance Sheet at such date All of our other deferred financing costs at December 3 , 20 4 and 20 5 (see Note 9) relate to Kronos' revolving credit facilities in North America and Europe, and continue to be recognized as an asset under the guidance of the ASU

In November 20 5, the FASB issued ASU 20 5 7, *Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes*, which eliminates the requirement to separate deferred income tax assets and liabilities into current and noncurrent amounts Under the ASU all deferred income tax assets and liabilities will be classified as noncurrent The current requirement that deferred income tax assets and liabilities of a tax paying component of an entity be offset and presented as a single amount is not affected by the amendments in this ASU This amendment is effective for us beginning in the first quarter of 20 7; however early adoption is permitted In addition, prospective or retrospective application is permitted We have elected to adopt this ASU retrospectively beginning with this Annual Report and accordingly we have presented all deferred income tax assets and liabilities as noncurrent in our Consolidated Balance Sheets and related Footnotes At December 3 , 20 4, we had previously recognized a current deferred income tax asset and liability of $ 3 4 million and $3 9 million, respectively, and a noncurrent deferred income tax asset and liability of $ 64 4 million and $4 2 8 million, respectively As a result of the retrospective application of this ASU, we no longer have a current deferred income tax asset or liability recognized at December 3 , 20 4, and the noncurrent deferred income tax asset and liability we now have recognized at December 3 , 20 4 is $ 60 9 million and $399 8 million, respectively See Note 2

Pending Adoption

In May 20 4, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No 20 4 09, *Revenue from Contracts with Customers (Topic 606)* This standard replaces existing revenue recognition guidance, which in many cases was tailored for specific industries, with a uniform accounting standard applicable to all industries and transactions The new standard, as amended, is currently effective for us beginning with the first quarter of 20 8 Entities may elect to adopt ASU No 20 4 09 retrospectively for all periods for all contracts and transactions which occurred during the period (with a few exceptions for practical expediency) or retrospectively with a cumulative effect recognized as of the date of adoption ASU No 20 4 09 is a fundamental rewriting of existing GAAP with respect to revenue recognition, and we are still evaluating the effect the Standard will have on our Consolidated Financial Statements We currently expect to adopt the standard in the first quarter of 20 8 In addition, we have not yet determined the method we will use to adopt the Standard

In January 20 6, the FASB issued ASU 20 6 0 , *Financial Instruments Overall (Subtopic 825 10): Recognition and Measurement of Financial Assets and Financial Liabilities*, which addresses certain aspects related to the recognition, measurement, presentation and disclosure of financial instruments The ASU requires equity investments (except for those accounted for under the equity method of accounting or those that result in the consolidation of the investee) to generally be measured at fair value with changes in fair value recognized in net income The amendment also requires a number of other changes, including among others: simplifying the impairment assessment for equity instruments without readily determinable fair values; eliminating the requirement for public business entities to disclose methods and assumptions used to determine fair value for financial instruments measured at amortized cost; requiring an exit price notion when measuring the fair value of financial instruments for disclosure purposes; and requiring separate presentation of financial assets and liabilities by measurement category and form of asset The changes indicated above will be effective for us beginning in the first quarter of 20 8, with prospective application required, and early adoption is not permitted The most significant aspect of adopting this ASU will be the requirement to recognize changes in fair value of our available for sale marketable equity securities in net income (currently changes in fair value of such securities are recognized in other comprehensive income)

In February 20 6, the FASB issued ASU 20 6 02, *Leases (Topic 842)*, which is a comprehensive rewriting of the lease accounting guidance which aims to increase comparability and transparency with regard to lease transactions The primary change will be the recognition of lease assets for the right of use of the underlying asset and lease liabilities for the obligation to make payments by lessees on the balance sheet for leases currently classified as operating leases The ASU also requires increased qualitative disclosure about leases in addition to quantitative disclosures currently required Companies are required to use a modified retrospective approach to adoption with a practical expedient which will allow companies to continue to account for existing leases under the prior guidance unless a lease is modified, other than the requirement to recognize the right of use asset and lease liability for all operating leases The changes indicated above will be effective for us beginning in the first quarter of 20 9, with early adoption is permitted We have not yet evaluated the effect this ASU will have on our Consolidated Financial Statements, but given the material amount of our future minimum payments under non cancellable operating leases at December 3 , 20 5 discussed in Note 7, we expect to recognize a material right of use lease asset and lease liability upon adoption of the ASU

Note 21. 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, 2014				
Net sales	$ 462.4	$ 491.7	$ 476.5	$ 432.0
Gross margin	85.8	104.2	115.8	97.0
Operating income	22.8	46.7	60.2	40.5
Net income	$ 4.6	$ 23.7	$ 37.5	$ 13.7
Amounts attributable to Valhi stockholders:				
Net income ( )	$ .8	$ 15.5	$ 28.7	$ 8.8
Basic and diluted income per share	$	$ .05	$ .08	$ .03
Year ended December 31, 2015				
Net sales	$ 416.1	$ 408.8	$ 383.2	$ 324.8
Gross margin	89.3	56.3	49.8	27.5
Operating income (loss)	34.6	(10.1)	(5.0)	(24.9)
Net income (loss)	$ 17.3	$ (139.4)	$ (13.3)	$ (35.7)
Amounts attributable to Valhi stockholders:				
Net income (loss) (2)	$ 11.9	$ (103.9)	$ (11.7)	$ (29.9)
Basic and diluted income (loss) per share	$ .04	$ (.30)	$ (.03)	$ (.10)

( ) We recognized the following amounts during 20 4:

- a $3 2 million net of noncontrolling interest non cash income tax benefit in the second quarter of 20 4 related to the release of a portion of our reserve for uncertain tax positions related to the completion of a Canadian income tax audit and to the release of a portion of our reserve for uncertain tax positions in conjunction with the completion of an audit of our U S income tax return for 2009; see Note 2;
- a $ 2 million net of noncontrolling interest cash tax benefit associated with certain U S income tax credits, which we elected to claim on our 20 3 amended U S federal tax return in the third quarter of 20 4; and
- aggregate insurance recoveries of $7 3 million, after tax and noncontrolling interest in the third quarter of 20 4

(2) We recognized the following amounts during 20 5:

- pre tax charges of $2 million, $ 4 million and $ 2 million in the second, third and fourth quarters, respectively, in workforce reduction charges in our Chemicals Segment (see Note 9);
- aggregate insurance recoveries of $3 0 million, after tax and noncontrolling interest primarily in the first quarter;
- non cash deferred income tax expense of $ 50 3 million, $2 3 million and $6 4 million in the second, third and fourth quarters, respectively, related to the recognition of a deferred income tax asset valuation allowance related to our Chemicals Segment's German and Belgium operations (see Note 2); and
- related to the non cash deferred income tax expense noted above we recognized non cash income tax benefit of $29 3 million, in the second quarter of 20 5 for the reduction in the deferred income taxes required to be recognized with respect to the excess of the financial reporting carrying amount over the income tax basis of our direct investment in Kronos common stock. (see Note 2)

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 3 or 5(d) of the Securities Exchange Act of 934, 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 , 20 6
(Chairman and Chief Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 934, 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
Thomas E Barry, March , 20 6
(Director)

/s/ Norman S Edelcup
Norman S Edelcup, March , 20 6
(Director)

/s/ W Hayden McIlroy
W Hayden McIlroy, March , 20 6
(Director)

/s/ Loretta J Feehan
Loretta J Feehan, March , 20 6
(Director)

/s/ Steven L Watson
Steven L Watson, March , 20 6
(Chairman of the Board and Chief Executive Officer)

/s/ Bobby D O'Brien
Bobby D O'Brien, March , 20 6
(President and Chief Financial Officer and Director, Principal Financial Officer)

/s/ Gregory M Swalwell
Gregory M Swalwell, March , 20 6
(Executive Vice President, Controller and Chief Accounting Officer, Principal Accounting Officer)

Exhibit 10.5

TAX AGREEMENT
Between
CONTRAN CORPORATION
and
VALHI, INC.

This Tax Agreement (the "Agreement") dated as of June 3, 2015 is between Contran Corporation ("Contran"), a Delaware corporation having its principal executive offices at Three Lincoln Centre, 5430 LBJ Freeway, Suite 1700, Dallas, Texas 75240, and Valhi, Inc. ("VHI"), a Delaware corporation having its principal executive offices at Three Lincoln Centre, 5430 LBJ Freeway, Suite 1700, Dallas, TX 75240.

WHEREAS, Contran and VHI file consolidated returns of federal income taxes and, subject to certain jurisdictional limitations, are subject to combined state and local tax reporting;

WHEREAS, this Agreement supercedes and amends and restates the Tax Agreement dated December 1, 2012 previously entered into between Contran and VHI;

WHEREAS, Contran and VHI wish to provide for the allocation of liabilities, and procedures to be followed, with respect to federal income taxes of VHI and any subsidiaries of VHI and with respect to certain combined state and local taxes on the terms of this Agreement; and

WHEREAS, Contran and VHI have historically followed the terms and conditions as provided in this Agreement, and this Agreement serves to formally document such terms and conditions which Contran and Valhi previously followed.

NOW, THEREFORE, in consideration of the promises and agreements herein contained, the parties hereto agree as follows:

1. <u>Definitions</u>. As used in this Agreement, the following terms have the meanings set forth below:

(a) Code: The Internal Revenue Code of 1986, as amended, and with respect to any section thereof any successor provisions under such Code or any successor Code.

(b) Combined Foreign, State and Local Taxes: For a taxable period, and with respect to a specified group of entities, the amount of all Foreign, State and Local Taxes, for which liability is computed on the basis of a combined, unitary or consolidated return (whether at the initiative of the tax authority or of the taxpayer).

(c) Contran Corporation: A Delaware corporation that is the common parent of a group of corporations, which group of corporations includes the VHI Group and Contran Group, electing to file a consolidated federal income tax return.

(d) Federal Taxes: All federal income taxes, together with all interest and penalties with respect thereto.

(e) Foreign, State and Local Taxes: All foreign, state and local taxes, including franchise and similar taxes, together with all interest and penalties with respect thereto.

(f) Contran Group: Contran and each of its direct and indirect subsidiaries which would be a member of an affiliated group, within the meaning of section 1504(a) of the Code, and eligible to file a combined, unitary or consolidated return of which Contran was the common parent (the "Contran Tax Group"), as such Contran Group is constituted from time to time. For purposes of this Agreement (to the extent related to the determination of Combined Foreign, State and Local Taxes for the Contran Group), the term "Contran Group" shall include all direct and indirect subsidiaries of Contran with reference to which Combined Foreign, State and Local Taxes are determined.

(g) VHI Group: VHI and each of its direct or indirect subsidiaries which would be a member of an affiliated group, within the meaning of section 1504(a) of the Code, and eligible to file a combined, unitary or consolidated return of which VHI was the common parent, as such VHI Group is constituted from time to time. For purposes of this Agreement (to the extent related to the determination of Combined Foreign, State and Local Taxes for the VHI Group) , the term "VHI Group" shall include all direct and indirect subsidiaries of VHI with reference to which Combined, Foreign, State and Local taxes are determined.

(h) VHI Group Tax Liability: For a taxable period, the liability for Federal Taxes and Combined Foreign, State and Local taxes, as applicable, that the VHI Group would have had if it were not a member of the Contran Tax Group during such taxable period (or during any taxable period prior thereto), and instead filed a separate consolidated or combined return, as applicable, for such taxable period; provided, however, that for purposes of determining such liability for a taxable period all tax elections shall be consistent with the tax elections made by Contran for such period. In making such tax elections it is understood Contran will make those tax elections which are beneficial to the Contran Tax Group on a consolidated basis. Nevertheless, Contran will use its best efforts in the case of those elections which affect the computation of the VHI Group Tax Liability, to make elections in a reasonable manner so as to minimize the VHI Group Tax Liability. For purposes of this Agreement, in determining the Combined Foreign, State and Local Taxes for the VHI Group, such determination shall be made based on a separate Foreign, State and Local Tax Calculation as if the VHI Group were a separate unitary filer with respect to states and other jurisdictions in which Contran is required to file on a unitary or combined basis.

(i) Foreign, State and Local Tax Calculation: For each reporting period, the Tax Calculation will be based on the estimated taxable income of the VHI Group for the taxable period that includes such reporting period, applied to current year tax rates and using the VHI Group's applicable apportionment factors and state, local or other applicable adjustments, in each case based on the applicable combined or unitary return most recently-filed as of each reporting period by the Contran Tax Group for each applicable tax jurisdiction (as modified for extraordinary, one-time event adjustments or tax law changes, if any, impacting the unitary calculation for the VHI Group).

2. Contran as Agent. Contran shall be the sole agent for the VHI Group in all matters relating to the VHI Group Tax Liability. The VHI Group shall not (a) terminate such agency or (b) without the consent of Contran, participate, or attempt to participate, in any matters related to the VHI Group Tax Liability, including, but not limited to, preparation or filing of, or resolution of disputes, protests or audits with the Internal Revenue Service, state or local taxing authorities concerning, the Contran Tax Group's consolidated returns of Federal Taxes, returns of Combined Foreign, State and Local Taxes or the VHI Group Tax Liability with respect thereto. The VHI Group shall cooperate fully in providing Contran with all information and documents necessary or desirable to enable Contran to perform its obligations under this Section, including completion of Internal Revenue Service and state or local tax audits in connection with such VHI Group Tax Liability and determination of the proper liability for such VHI Group Tax Liability.

3. Liability for Taxes; Refunds.

(a) Contran, as the common parent of the VHI Group, shall be responsible for, and shall pay to the appropriate taxing authority, as applicable, the consolidated tax liability for Federal Taxes and Combined Foreign, State and Local Taxes for the Contran Group and has the sole right to any refunds received from such taxing authority subject to the provisions of Sections 5 and 6 of this Agreement.

(b) Notwithstanding any other provision of this Agreement, VHI and each subsidiary of VHI which is a member of the VHI Group shall be severally liable to Contran for the VHI Group Tax Liability.

(c) VHI shall indemnify Contran and hold it and the Contran Group other than the VHI Group, harmless from and against any deficiency in the VHI Group Tax Liability that may be due to Contran.

(d) Contran shall indemnify VHI and hold it and the VHI Group harmless from and against any Federal Taxes and Combined Foreign, State and Local Taxes attributable to the Contran Group or any other member of the Contran Tax Group, other than the VHI Group, as such taxes are determined under this and other tax sharing agreements.

4. Tax Returns. Contran shall file on behalf of the VHI Group any and all federal, foreign, state and local tax returns that are required as they pertain to the VHI Group Tax Liability. The VHI Group, at Contran's request, shall join in any applicable consolidated returns of Federal Taxes and any returns of Combined Foreign, State and Local Taxes (for which returns have not been theretofore filed) and execute its consent, if such consent has not previously been executed, to each such filing on any form as may be prescribed for such consent if such consent is required. The decision of Contran's Vice President and Tax Director (or any other officer so designated by Contran) with responsibility for tax matters shall, subject to the provisions of this Agreement, be binding in any dispute between Contran and the VHI as to what tax position should be taken with respect to any item or transaction of the VHI Group. The preceding sentence is limited to the tax positions that affect the VHI Group Tax Liability and the combined Contran Group and Contran Tax Group. In addition, Contran and members of the Contran Group, including VHI and members of the VHI Group, shall provide each other with such cooperation, assistance and information as each of them may request of the other with respect to the filing of any tax return, amended return, claim for refund or other document with any taxing authority. VHI shall be solely responsible for all taxes due for the VHI Group with respect to tax returns filed by VHI or a member of the VHI Group that are required to be filed on a separate company basis, independent of Contran.

5. Payment of VHI Group Tax Liability for Federal Taxes and Foreign, State and Local Taxes. On or before each date, as determined under section 6655 of the Code (with respect to Federal Taxes) and the applicable tax provisions with respect to any Foreign, State and Local Taxes due pursuant to this Agreement, for payment of an installment of estimated Federal Taxes or any Foreign, State and Local Taxes, VHI shall pay to Contran an amount equal to the installment which the VHI Group would have been required to pay as an estimated payment of Federal Taxes to the Internal Revenue Service or any Foreign, State and Local Taxes to the applicable taxing authority if it were filing a separate consolidated, combined or unitary return in respect of the VHI Group Tax Liability. Any balance owed with respect to the VHI Group Tax Liability for such taxable period shall be paid to Contran on or before the 15th day of the third month after the close of such taxable period. If it is not possible to determine the amount of such balance on or before such day, (a) a reasonable estimate thereof shall be paid on or before such day, (b) the amount of such balance shall be finally determined on or before the earlier of; (i) the 15th day of the ninth month after the close of such taxable period (or the applicable due date for the Contran foreign, state or local combined or unitary return) and (ii) the date on which the Contran Group consolidated tax return for such period is filed with the Internal Revenue Service or the applicable tax authority, and (c) any difference between the amount so determined and the estimated amount paid shall; (i) in the case of an underpayment, be promptly paid to Contran and (ii) in the case of an overpayment, be promptly refunded or applied against the estimated VHI Group Tax Liability for the immediately following tax period, at the option of Contran. If the overpayment is not applied to the immediately following tax period, such overpayment shall be promptly refunded to the VHI Group. As between the parties to this Agreement, the VHI Group shall be solely responsible for the VHI Group Tax Liability and shall have no responsibility for Federal Taxes of the Contran Group other than payment of the VHI Group Tax Liability in accordance with the terms of this Agreement. Notwithstanding the foregoing, Contran at its option may extend the payment due date for any of the payments referenced above.

6. Refunds for VHI Group Losses and Credits for Federal Taxes. If the calculation with respect to the VHI Group Tax Liability for Federal Taxes results in a net operating loss ("NOL") for the current tax period that, in the absence of a Code Section 172(b)(3) election made by Contran, is carried back under Code Sections 172 and 1502 to a prior taxable period or periods of the VHI Group with respect to which the VHI Group previously made payments to Contran, then, in that event, Contran shall pay (or credit) VHI an amount equal to the tax refund to which the VHI Group would have been entitled had the VHI Group filed a separate consolidated federal income tax return for such year (but not in excess of the net aggregate amount of the VHI Group Tax Liability paid to Contran with respect to the preceding two taxable periods). If the calculation with respect to the VHI Group Tax Liability results in an NOL for the current tax period, that subject to the Code Section 172(b)(3) election made by Contran, is not carried back under Code Sections 172 and 1502 to a prior taxable period or periods of the VHI Group with respect to which VHI made payments to Contran or is not carried back because the Contran Tax Group does not have a consolidated net operating loss for the current tax period, then, in that event such NOL shall be an NOL carryover to be used in computing the VHI Group Tax Liability for future taxable periods, under the law applicable to NOL carryovers in general, as such law applies to the relevant taxable period. Payments made pursuant to this Section 6 shall be made on the date that Contran (or any successor common parent of a tax group to which the Contran Group is a member) files its consolidated federal income tax return for the taxable period involved. Principles similar to those discussed in this Section 6 shall apply in the case of the utilization of all VHI Group loss and credit carrybacks and carryovers.

7. Refunds for VHI Group Combined or Unitary Foreign, State and Local Losses and Credits. The foregoing principles contained in Section 6 shall apply in similar fashion to any consolidated, unitary or combined foreign, state or other local income tax returns, containing any member of the VHI Group, which may be filed based on the VHI Group Tax Liability for Foreign, State and Local Taxes.

8. Subsequent Adjustments. If any settlement with the Internal Revenue Service, foreign, state or local tax authority or court decision which has become final results in any adjustment to any item of income, deduction, loss or credit to the Contran Group in respect of any taxable period subject to this Agreement, which, in any such case, affects or relates to any member of the VHI Group as constituted during such taxable period, the VHI Tax Group Liability shall be re-determined to give effect to such adjustment as if it had been made as part of or reflected in the original computation of the VHI Tax Group Liability and proper adjustment of amounts paid or owing hereunder in respect of such liability and allocation shall be promptly made in light thereof.

9. Amendments. This Agreement may be amended, modified, superseded or cancelled, and any of the terms, covenants, or conditions hereof may be waived, only by a written instrument specifically referring to this Agreement and executed by all parties (or, in the case of a waiver, by or on behalf of the party waiving compliance). The failure of any party at any time or times to require performance of any provision of this Agreement shall in no manner affect the right at a later time to enforce the same. No waiver by any party of any condition, or of any breach of any term or covenant, contained in this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such condition or breach, or a waiver of any other condition or of any breach of any other term or covenant.

10. Retention of Records. Contran shall retain all tax returns, tax reports, related workpapers and all schedules (along with all documents that pertain to any such tax returns, reports or workpapers) that relate to a taxable period in which the VHI Group is included in a consolidated or combined tax return with Contran. Contran shall make such documents available to VHI at VHI's request. Contran shall not dispose of such documents without the permission of VHI.

11. Headings. The headings of this Agreement are for convenience of reference only, and shall not in any way affect the meaning or interpretation of this Agreement.

12. Governing Law. This Agreement shall be construed and enforced in accordance with the laws of the State of Delaware without regard to conflicts of laws provisions.

13. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be an original, but all of which shall constitute but one agreement.

14. Successors. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective subsidiaries, and their respective successors and assigns.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the date first above written.

CONTRAN CORPORATION

By: /s/ Gregory M. Swalwell
Gregory M. Swalwell
Vice President and Controller

VALHI, INC.

By: /s/ Kelly D. Luttmer
Kelly D. Luttmer
Executive Vice President and Tax Director

EXHIBIT 21.1

SUBSIDIARIES OF THE REGISTRANT

Name o Co pora ion	Ju isdic ion o Inco pora ion or O ganiza ion	% o Vo ing Securi ies Held a December 31, 2015 (1)
ASC Holdings, Inc	Utah	00%
Andrews County Holdings, Inc	Delaware	00%
Waste Control Specialists LLC	Delaware	00%
Kronos Worldwide, Inc (2)	Delaware	50%
NL Industries, Inc (2), (3), (4)	New Jersey	83%
CompX International Inc (4)	Delaware	87%
Tremont LLC	Delaware	00%
TRECO LLC	Nevada	00%
Basic Management, Inc	Nevada	63%
Basic Water Company	Nevada	00%
Basic Water Company SPE LLC	Nevada	00%
Basic Environmental Company LLC	Nevada	00%
Basic Power Company	Nevada	00%
Basic Remediation Company LLC	Nevada	00%
Basic Land Company	Nevada	00%
The LandWell Company LP (5)	Delaware	50%
Henderson Interchange Sign LLC	Nevada	00%
TRE Holding Corporation	Delaware	00%
TRE Management Company	Delaware	00%
Tall Pines Insurance Company	Vermont	00%
Medite Corporation	Delaware	00%
Impex Realty Holding, Inc	Delaware	00%

( ) Held by the Registrant or the indicated subsidiary of the Registrant

(2) Subsidiaries of Kronos are incorporated by reference to Exhibit 2 of Kronos' Annual Report on Form 0 K for the year ended December 3 , 20 5 (File No 333 00047) NL owns an additional 30% of Kronos directly

(3) Subsidiaries of NL are incorporated by reference to Exhibit 2 of NL's Annual Report on Form 0 K for the year ended December 3 , 20 5 (File No 640)

(4) Subsidiaries of CompX are incorporated by reference to Exhibit 2 of CompX's Annual Report on Form 0 K for the year ended December 3 , 20 5 (File No 3905)

(5) TRECO LLC owns an additional 27% of The LandWell Company LP directly

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S 8 (No 333 8 79) of Valhi, Inc , of our report dated March , 20 6, relating to the consolidated financial statements and effectiveness of internal control over financial reporting, which appears in this Form 0 K

/s/ PricewaterhouseCoopers LLP
PricewaterhouseCoopers LLP
Dallas, Texas
March , 20 6

Exhibit 31.1

I, Steven L. Watson, certify that:

) I have reviewed this Annual Report on Form 0 K of Valhi, Inc.;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 3a 5(e) and 5d 5(e)) and internal control over financial reporting (as defined in Exchange Act Rules 3a 5(f) and 5d 5(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date: March , 20 6

/s/ Steven L. Watson
Steven L. Watson
Chairman and Chief Executive Officer

Exhibit 31.2

I, Bobby D O'Brien, certify that:

) I have reviewed this Annual Report on Form 0 K of Valhi, Inc ;

2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4) The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 3a 5(e) and 5d 5(e)) and internal control over financial reporting (as defined in Exchange Act Rules 3a 5(f) and 5d 5(f)) for the registrant and have:

a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5) The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):

a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting

Date: March , 20 6

/s/ Bobby D O'Brien
Bobby D O'Brien
Director, President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Valhi, Inc (the "Company") on Form 0 K for the year ended December 3 , 20 5 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, Steven L Watson, Chief Executive Officer of the Company, and Bobby D O'Brien, President and Chief Financial Officer of the Company, certify, pursuant to 8 U S C Section 350, as adopted pursuant to Section 906 of the Sarbanes Oxley Act of 2002, that:

( ) The Report fully complies with the requirements of Section 3(a) or 5(d) of the Securities Exchange Act of 934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company

/s/ Steven L Watson
Steven L Watson
Chairman and Chief Executive Officer
March , 20 6

/s/ Bobby D O'Brien
Bobby D O'Brien
Director, President and Chief Financial Officer
March , 20 6

Note: The certification the registrant furnishes in this exhibit is not deemed "filed" for purposes of Section 8 of the Securities Exchange Act of 934, as amended, or otherwise subject to the liabilities of that Section Registration Statements or other documents filed with the Securities and Exchange Commission shall not incorporate this exhibit by reference, except as otherwise expressly stated in such filing