

WESTLAKE CHEMICAL CORP

Form 10-K

February 24, 2016

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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

Form 10-K

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

For the Fiscal Year Ended December 31, 2015

or

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

For the Transition Period from to

Commission File No. 001-32260

Westlake Chemical Corporation  
(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction of  
incorporation or organization)  
2801 Post Oak Boulevard, Suite 600  
Houston, Texas 77056  
(Address of principal executive offices, including zip code)  
(713) 960-9111  
(Registrant's telephone number, including area code)

76-0346924  
(I.R.S. Employer  
Identification No.)

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

Title of each class  
Common Stock, \$0.01 par value

Name of each exchange on which registered  
New York Stock Exchange, Inc.

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 ý No ..

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ý No ..

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

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act:

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

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

The aggregate market value of the registrant's voting stock held by non-affiliates of the registrant on June 30, 2015, the end of the registrant's most recently completed second fiscal quarter, based on a closing price on June 30, 2015 of \$68.59 on the New York Stock Exchange was approximately \$2.7 billion.

There were 130,218,346 shares of the registrant's common stock outstanding as of February 17, 2016.

**DOCUMENTS INCORPORATED BY REFERENCE:**

Certain information required by Part II and Part III of this Form 10-K is incorporated by reference from the registrant's definitive Proxy Statement to be filed pursuant to Regulation 14A with respect to the registrant's 2016 Annual Meeting of Stockholders to be held on May 10, 2016.

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**INDUSTRY AND MARKET DATA**

Industry and market data used throughout this Form 10-K were obtained through internal company research, surveys and studies conducted by unrelated third parties and publicly available industry and general publications, including information from IHS Chemical and Chemical Data, Inc. We have not independently verified market and industry data from external sources. While we believe internal company estimates are reliable and market definitions are appropriate, neither such estimates nor these definitions have been verified by any independent sources.

**PRODUCTION CAPACITY**

Unless we state otherwise, annual production capacity estimates used throughout this Form 10-K represent rated capacity of the facilities at December 31, 2015. We calculated rated capacity by estimating the number of days in a typical year that a production unit of a plant is expected to operate, after allowing for downtime for regular maintenance, and multiplying that number by an amount equal to the unit's optimal daily output based on the design feedstock mix. Because the rated capacity of a production unit is an estimated amount, actual production volumes may be more or less than the rated capacity.

**NON-GAAP FINANCIAL MEASURES**

The body of accounting principles generally accepted in the United States is commonly referred to as "GAAP." For this purpose, a non-GAAP financial measure is generally defined by the Securities and Exchange Commission ("SEC") as one that purports to measure historical or future financial performance, financial position or cash flows, but excludes or includes amounts that would not be so adjusted in the most comparable GAAP measures. In this report, we disclose so-called non-GAAP financial measures, primarily earnings before interest, taxes, depreciation and amortization ("EBITDA"). EBITDA is calculated as net income before interest expense, income taxes, depreciation and amortization. The non-GAAP financial measures described in this Form 10-K are not substitutes for the GAAP measures of earnings and cash flow.

EBITDA is included in this Form 10-K because our management considers it an important supplemental measure of our performance and believes that it is frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry, some of which present EBITDA when reporting their results. We regularly evaluate our performance as compared to other companies in our industry that have different financing and capital structures and/or tax rates by using EBITDA. In addition, we utilize EBITDA in evaluating acquisition targets. Management also believes that EBITDA is a useful tool for measuring our ability to meet our future debt service, capital expenditures and working capital requirements, and EBITDA is commonly used by us and our investors to measure our ability to service indebtedness. EBITDA is not a substitute for the GAAP measures of earnings or of cash flow and is not necessarily a measure of our ability to fund our cash needs. In addition, it should be noted that companies calculate EBITDA differently and, therefore, EBITDA as presented for us may not be comparable to EBITDA reported by other companies. EBITDA has material limitations as a performance measure because it excludes interest expense, depreciation and amortization, and income taxes.

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PART I

Item 1. Business

General

We are a vertically integrated global manufacturer and marketer of basic chemicals, vinyls, polymers and building products. Our products include some of the most widely used chemicals in the world, which are fundamental to many diverse consumer and industrial markets, including flexible and rigid packaging, automotive products, coatings, residential and commercial construction as well as other durable and non-durable goods. We operate in two principal operating segments, Olefins and Vinyls. We are highly integrated along our olefins product chain with significant downstream integration into polyethylene and styrene monomer. We are also an integrated global producer of vinyls with substantial downstream integration into polyvinyl chloride ("PVC") building products.

We began operations in 1986 after our first polyethylene plant, an Olefins segment business, near Lake Charles, Louisiana was acquired from Occidental Petroleum Corporation. We began our vinyls operations in 1990 with the acquisition of a vinyl chloride monomer ("VCM") plant in Calvert City, Kentucky from the Goodrich Corporation. In 1992, we commenced our Vinyls segment building products operations after acquiring three PVC pipe plants. Since 1986, we have grown rapidly into an integrated global producer of petrochemicals, vinyls, polymers and building products. We achieved this by acquiring existing plants or constructing new plants and completing numerous capacity or production line expansions. We regularly consider acquisitions and other internal and external growth opportunities that would be consistent with or complementary to our overall business strategy.

In 2014, we formed Westlake Chemical Partners LP ("Westlake Partners") to operate, acquire and develop facilities for the processing of natural gas liquids and related assets. Also in 2014, Westlake Partners completed an initial public offering of 12,937,500 common units (the "Westlake Partners IPO"). As of February 17, 2016, Westlake Partners' assets consist of a 13.3% limited partner interest in Westlake Chemical OpCo LP ("OpCo"), as well as the general partner interest in OpCo. Prior to the Westlake Partners IPO, OpCo's assets were wholly owned by us. OpCo's assets include two natural gas liquids processing facilities at our Lake Charles site, one natural gas liquids processing facility at our Calvert City site and a 200-mile common carrier ethylene pipeline that runs from Mont Belvieu, Texas to the Longview, Texas site, which includes our Longview polyethylene production facility. We retain an 86.7% limited partner interest in OpCo, a 52.2% limited partner interest in Westlake Partners (common and subordinated units), a general partner interest in Westlake Partners and incentive distribution rights. The operations of Westlake Partners are consolidated in our financial statements. We are party to certain agreements with Westlake Partners and OpCo whereby, among other things, OpCo sells us 95% of the ethylene it produces on a cost-plus basis that is expected to generate a fixed margin per pound of \$0.10. We use this ethylene in the production processes of both our Olefins and Vinyls segments. For more information, see "—Olefins Business" and "—Vinyls Business" below.

We benefit from highly integrated production facilities that allow us to process raw materials into higher value-added chemicals and building products. As of February 17, 2016, we (directly and through OpCo and our 95% owned Asian joint venture) had 19.7 billion pounds per year of aggregate production capacity at 21 manufacturing sites in North America, Europe and Asia.

Olefins Business

Products

Olefins are the basic building blocks used to create a wide variety of petrochemical products. We manufacture ethylene (through OpCo), polyethylene, styrene and associated co-products at our manufacturing facility in Lake Charles and polyethylene at our Longview facility. We have two ethylene plants, which are owned by OpCo, two polyethylene plants and one styrene monomer plant at our Lake Charles site. We have three polyethylene plants and a specialty polyethylene wax plant at our Longview site.

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The following table illustrates our production capacities at February 17, 2016 by principal product and the primary end uses of these materials:

Product	Annual Capacity (Millions of pounds)	End Uses
Ethylene <sup>(1)</sup>	2,740	Polyethylene, ethylene dichloride ("EDC"), styrene, ethylene oxide/ethylene glycol High clarity packaging, shrink films, laundry and dry cleaning bags, ice bags, frozen foods packaging,
Low-Density Polyethylene ("LDPE")	1,500	bakery bags, coated paper board, cup stock, paper folding cartons, lids, closures and general purpose molding
Linear Low-Density Polyethylene ("LLDPE")	1,070	Heavy-duty films and bags, general purpose liners Consumer disposables, packaging material,
Styrene	570	appliances, paints and coatings, resins and building materials

(1) Production capacity owned by OpCo.

**Ethylene.** Ethylene is the world's most widely used petrochemical in terms of volume. It is the key building block used to produce a large number of higher value-added chemicals including polyethylene, EDC, VCM and styrene. OpCo has the capacity to produce 2.7 billion pounds of ethylene per year at our Lake Charles site, and we have the capability to consume all of OpCo's production that we purchase at Lake Charles to produce polyethylene and styrene monomer in our Olefins business and to produce VCM and EDC in our Vinyls business. OpCo also produces ethylene for our Vinyls segment at our Calvert City site, and substantially all of the ethylene we purchase from OpCo at Calvert City is used internally in the production of VCM. For OpCo's annual ethylene production that is purchased by us for our Vinyls business, see "Business—Vinyls Business." In addition, we (through OpCo) produce ethylene co-products including chemical grade propylene, crude butadiene, pyrolysis gasoline and hydrogen. We (through OpCo) sell our entire output of these co-products to external customers. OpCo currently plans to begin the upgrade and capacity expansion of its Petro 1 ethylene unit at our Lake Charles site in the second quarter of 2016.

**Polyethylene.** Polyethylene, the world's most widely consumed polymer, is used in the manufacture of a wide variety of film, coatings and molded product applications primarily used in packaging. Polyethylene is generally classified as either LDPE, LLDPE or high-density polyethylene ("HDPE"). The density correlates to the relative stiffness of the end-use products. The difference between LDPE and LLDPE is molecular, and products produced from LLDPE, in general, have higher strength properties than products produced from LDPE. LDPE exhibits better clarity and other physical properties and is used in end products such as bread bags, dry cleaning bags, food wraps, milk carton coatings and snack food packaging. LLDPE is used for higher film strength applications such as stretch film and heavy duty sacks. HDPE is used to manufacture products such as grocery, merchandise and trash bags, rigid plastic containers, plastic closures and pipe.

We are the leading producer of LDPE by capacity in North America and predominantly use the autoclave technology (versus tubular technology), which is capable of producing higher margin specialty polyethylene products. In 2015, our annual capacity of 1.5 billion pounds was available in numerous formulations to meet the needs of our diverse customer base. We also have the capacity to produce 1.1 billion pounds of LLDPE per year in various formulations. We produce LDPE and LLDPE at both Lake Charles and Longview. Our Lake Charles and Longview facilities also have the capability to produce HDPE. We sell polyethylene to external customers as a final product in pellet form.

**Styrene.** Styrene is used to produce derivatives such as polystyrene, acrylonitrile butadiene styrene, unsaturated polyester and synthetic rubber. These derivatives are used in a number of applications including consumer disposables, food packaging, housewares, paints and coatings, building materials, tires and toys. We produce styrene at our Lake Charles plant, where we have the capacity to produce 570 million pounds of styrene per year, all of which

is sold to external customers.

#### Feedstocks

We are highly integrated along our olefins product chain. We (through OpCo) produce most of the ethylene required to produce our polyethylene, VCM and styrene. Ethylene can be produced from either petroleum liquid feedstocks, such as naphtha, condensates and gas oils, or from natural gas liquid feedstocks, such as ethane, propane and butane. Both of OpCo's Lake Charles ethylene plants use ethane as the primary feedstock. Pursuant to a feedstock supply agreement between us and OpCo, OpCo receives ethane feedstock at our Lake Charles site through several pipelines from a variety of suppliers in Texas

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and Louisiana. We own a 50% interest in a 104-mile natural gas liquids pipeline from Mont Belvieu to our Lake Charles site. OpCo owns a 200-mile ethylene pipeline that runs from Mont Belvieu to our Longview site. In addition to ethylene supplied by OpCo, we also acquire ethylene from third parties in order to supply a portion of our ethylene requirements. We acquire butene and hexene to manufacture polyethylene and benzene to manufacture styrene. We receive butene and hexene at the Lake Charles site and hexene at the Longview site via rail car from several suppliers. We receive benzene via barges, ships and pipeline pursuant to short-term arrangements. We purchase butene and hexene pursuant to multi-year contracts, some of which are renewable for an additional term subject to either party to the contract notifying the other party that it does not wish to renew the contract. We purchase electricity for our Lake Charles facility under long-term industrial contracts.

### Marketing, Sales and Distribution

We have an internal sales force that sells our products directly to our customers. Our polyethylene customers are some of the nation's largest producers of film and flexible packaging.

We and OpCo sell ethylene and ethylene co-products to external customers. OpCo's primary ethylene co-products are chemical grade propylene, crude butadiene, pyrolysis gasoline and hydrogen. Our and OpCo's sales are made under spot and long-term agreements.

We have storage agreements and exchange agreements that allow us and OpCo access to customers who are not directly connected to the pipeline system that we own. OpCo ships crude butadiene and pyrolysis gasoline by rail or truck. Additionally, we transport our polyethylene and styrene by rail or truck. Further, styrene can be transported by barge or ship.

No single customer accounted for 10% or more of net sales for the Olefins segment in 2015.

### Competition

The markets in which our Olefins business operates are highly competitive. We compete on the basis of customer service, product deliverability, quality, consistency, performance and price. Our competitors in the ethylene, polyethylene and styrene markets are some of the world's largest chemical companies, including Chevron Phillips Chemical Company, The Dow Chemical Company, ExxonMobil Chemical Company, INEOS Group Limited, LyondellBasell Industries, N.V. and NOVA Chemicals Corporation.

### Vinyls Business

#### Products

Principal products in our integrated Vinyls segment include PVC, VCM, EDC, chlorine, caustic soda and, through OpCo, ethylene. We also manufacture and sell building products fabricated from PVC, including pipe, fittings, profiles, foundation building products, fence and deck components, window and door components and film and sheet products. We manage our integrated Vinyls production chain, from the basic chemicals to finished building products, to optimize product margins and capacity utilization. Our primary North American chemical manufacturing facilities are located in our Calvert City and Geismar, Louisiana sites. Our Calvert City site includes an ethylene plant, which is owned by OpCo, a chlor-alkali plant, a VCM plant and a PVC plant. Our Geismar site includes a chlor-alkali plant, an EDC plant, a VCM plant and a PVC plant. Our European chemical manufacturing facilities are located in Germany and the United Kingdom and include two chlor-alkali plants, two VCM plants and six PVC plants. Our Asian manufacturing facility (through our 95% owned Asian joint venture) is located near Shanghai, in the People's Republic of China and includes a PVC plant and a PVC film and sheet plant. As of February 17, 2016, we owned 11 building product facilities.



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The following table illustrates our production capacities at February 17, 2016 by principal product and the end uses of these products:

Product <sup>(1)</sup>	Annual Capacity <sup>(2)</sup> (Millions of pounds)	End Uses
Specialty PVC	1,100	Automotive sealants, cable sheathing, medical applications and other consumer applications
Commodity PVC	2,820	Construction materials including pipe, siding, profiles for windows and doors, film and sheet for packaging and other consumer applications
VCM	3,320	PVC
Chlorine	2,200	VCM, organic/inorganic chemicals, bleach
Caustic Soda	2,420	Pulp and paper, organic/inorganic chemicals, neutralization, alumina
Ethylene <sup>(3)</sup>	630	VCM
Building Products	1,280	Pipe: water and sewer, plumbing, irrigation, conduit; fittings; profiles and foundation building products; window and door components; fence and deck components; film and sheet

(1)EDC, a VCM intermediate product, is not included in the table.

(2)Includes capacity related to our 95% owned Asian joint venture.

(3)Production capacity owned by OpCo.

PVC. PVC, the world's third most widely used plastic, is an attractive alternative to traditional materials such as glass, metal, wood, concrete and other plastic materials because of its versatility, durability and cost-competitiveness. PVC is produced from VCM, which is, in turn, made from chlorine and ethylene. PVC compounds are made by combining PVC resin with various additives in order to make either rigid and impact-resistant or soft and flexible compounds. The various compounds are then fabricated into end-products through extrusion, calendaring, injection-molding or blow-molding. Flexible PVC compounds are used for wire and cable insulation, medical films and packaging, flooring, wall coverings, automotive interior and exterior trims and packaging. Rigid extrusion PVC compounds are commonly used in window frames, vertical blinds and construction products, including pipe and siding.

Injection-molding PVC compounds are used in specialty products such as computer housings and keyboards, appliance parts and bottles. We have the capacity to produce 1.3 billion pounds and 600 million pounds of commodity PVC per year at our Calvert City facility and Geismar facility, respectively. In addition, we have the capacity to produce 1.1 billion pounds of specialty PVC per year at our European facilities and 620 million pounds and 300 million pounds of commodity PVC per year at our European and Asian facilities, respectively. We have the capacity to use a majority of our North American-produced PVC internally in the production of our building products. The remainder of our PVC, including the PVC produced at our European and Asian facilities, is sold to downstream fabricators and the international markets.

VCM. VCM is used to produce PVC, solvents and PVC-related products. We use ethylene and chlorine to produce VCM. We have the capacity to produce 1.3 billion pounds of VCM per year at our Calvert City facility, 550 million pounds per year at our Geismar facility and 1.5 billion pounds per year at our European facilities. Substantially all of our VCM is used internally in our PVC operations.

Chlorine and Caustic Soda. We combine salt and electricity to produce chlorine and caustic soda, commonly referred to as chlor-alkali, at our Calvert City, Geismar, Gendorf, Germany and Knapsack, Germany facilities. We use our chlorine production in our VCM and EDC plants. We currently have the capacity to supply all of our chlorine requirements internally. Our caustic soda is sold to external customers who use it for, among other things, the production of pulp and paper, organic and inorganic chemicals and alumina.

Ethylene. We use the ethylene we purchase that is produced by OpCo at Calvert City to produce VCM. OpCo's Calvert City ethylene plant has the capacity to produce approximately 40% of the ethylene required for our total VCM production. We obtain the remainder of the ethylene we need for our Vinyls business from OpCo's Lake Charles plant and from third party purchases. OpCo's Calvert City ethylene plant utilizes ethane feedstock and enables us, through OpCo, to enhance our vinyl chain integration. In January 2016, OpCo announced an expansion project to increase the ethylene capacity of its ethylene plant at our Calvert City facility. The expansion is expected to increase ethylene capacity by approximately 70 million pounds annually and is targeted for completion during the first half of 2017. Combined with other incremental capacity increases, the

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total ethylene capacity of OpCo's ethylene plant at our Calvert City facility is expected to increase to 730 million pounds annually at the completion of this project.

**Building Products.** Products made from PVC are used in construction materials ranging from water and sewer systems to home and commercial applications for fence, deck, window and door systems. We manufacture and market water, sewer, irrigation and conduit pipe products under the "North American Pipe" brand and specialty pipe, fittings, profiles and foundation building products under the "North American Specialty Products" brand. We also manufacture and market PVC fence, decking, windows and door profiles under the "Westech Building Products" brand. We manufacture film and sheet at our Asian facility for both Asian and global markets. All of our building products are sold to external customers. Predominantly all of the PVC we require for our building products is produced internally. We purchase the remainder of our PVC requirements at market prices. The combined capacity of our 11 building products plants is 1.3 billion pounds per year.

### **Feedstocks**

We are highly integrated along our vinyls production chain. We produce most of the North American ethylene required by our Calvert City and Geismar facilities (through OpCo), and most of the VCM and all of the chlorine used in our Vinyls business. Ethylene produced at OpCo's Calvert City facility utilizes ethane feedstock. We purchase the ethylene required for our European facilities from a number of sources under various contracts. We have access to, and partially own, an ethylene pipeline in Germany. We purchase the salt required for our chlor-alkali plants pursuant to long-term contracts. We purchase electricity for our North American and European facilities under long-term industrial contracts. We purchase VCM for our Asian PVC plant on a spot basis.

Our Calvert City, Geismar and Asian facilities supply predominantly all of the PVC required for our building products plants. We may also purchase PVC at market prices, if needed. The remaining feedstocks for building products include pigments, fillers and stabilizers, which we purchase under short-term contracts based on prevailing market prices.

### **Marketing, Sales and Distribution**

We have the capacity to use primarily all of our chlorine internally to produce VCM and EDC, most of which, in turn, is used to produce PVC. We sell substantially all of our caustic soda production to external customers. We have the capacity to use a majority of our North American-produced PVC internally in the production of our building products. The remainder of our PVC, including the PVC produced at our European and Asian facilities, is sold to downstream fabricators and the international markets.

We are the second largest manufacturer of PVC pipe by capacity in the United States. We sell a majority of our PVC pipe, fence, window, door profiles and film and sheet products through a combination of manufacturer's representatives and our internal sales force.

No single customer accounted for 10% or more of net sales for the Vinyls segment in 2015.

### **Competition**

The markets in which our Vinyls business operates are highly competitive. Competition in the vinyls market is based on product availability, product performance, customer service and price. We compete in the vinyls market with other producers including Formosa Plastics Corporation, Axiall Corporation, Oxy Chem, LP, Shintech, Inc., Mexichem, S.A.B. de C.V., INOVYN ChlorVinyls Limited, VYNOVA Group and Kem One Group SAS.

Competition in the building products market is based on on-time delivery, product quality, customer service, product consistency and price. We compete in the building products market with other producers and fabricators including Diamond Plastics Corporation and JM Eagle.

### **Environmental and Other Regulation**

As is common in our industry, obtaining, producing and distributing many of our products involves the use, storage, transportation and disposal of large quantities of toxic and hazardous materials, and our manufacturing operations require the generation and disposal of large quantities of hazardous wastes. We are subject to extensive, evolving and increasingly stringent international, national, state and local environmental laws, regulations and directives, which address, among other things, the following:

- emissions to the air;
- discharges to land or to surface and subsurface waters;

other releases into the environment;

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remediation of contaminated sites;

generation, handling, storage, transportation, treatment and disposal of waste materials; and

maintenance of safe conditions in the workplace.

We are subject to environmental laws and regulations that can impose civil and criminal sanctions and that may require us to mitigate the effects of contamination caused by the release or disposal of hazardous substances into the environment. Under one law, the U.S. Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA"), an owner or operator of property may be held strictly liable for remediating contamination without regard to whether that person caused the contamination, and without regard to whether the practices that resulted in the contamination were legal at the time they occurred. Because several of our production sites have a history of industrial use, it is impossible to predict precisely what effect these legal requirements will have on us.

The Federal Clean Air Act. The Clean Air Act ("CAA") and its implementing regulations, as well as the corresponding state laws and regulations, impose permitting requirements and emission control requirements relating to specific air pollutants, as well as the requirement for certain facilities to maintain a risk management program to help prevent accidental releases of certain substances. Air quality standards promulgated pursuant to the CAA may require the installation of new or additional emission control equipment or changes in facility operations. If new controls or changes to operations are needed, the costs could be significant. In addition, failure to comply with the requirements of the CAA, its implementing regulations, and permits issued under the CAA, could result in fines, penalties or other sanctions.

Release Reporting. The release of hazardous substances or extremely hazardous substances into the environment is subject to release reporting requirements under federal and state environmental laws, including the Emergency Planning and Community Right-to-Know Act. If we fail to properly report a release, or if the release violates the law or our permits, it could cause us to become the subject of a governmental enforcement action or third-party claims, which could result in significant liability.

Clean Water Act. The Clean Water Act ("CWA") and analogous state laws impose restrictions and strict controls with respect to the discharge of pollutants, including spills and leaks of oil and other substances, into waters of the U.S. Federal and state regulatory agencies can impose administrative, civil and criminal penalties for non-compliance with discharge permits or noncompliance with other requirements of the CWA and analogous state laws and regulations.

Waste Management. The Resource Conservation and Recovery Act ("RCRA") and analogous state laws establish stringent requirements for the generation, handling, storage, transportation, and disposal of hazardous wastes. At facilities where hazardous wastes have been spilled, released into the environment, or disposed, these laws may require costly investigations, studies, and response actions, possibly including removal and re-disposal of any such wastes. RCRA also establishes extensive recordkeeping, reporting and permitting requirements. We generate large quantities of hazardous wastes in connection with our operations, and could incur significant liabilities under RCRA and similar laws for any mismanagement or other improper or unauthorized handling of such wastes.

European Regulations. Under the Industrial Emission Directive ("IED"), European Union member state governments are expected to adopt rules and implement environmental permitting programs relating to air, water and waste for industrial facilities. In this context, concepts such as BAT ("best available technique") are being explored. Future implementation of these concepts may result in technical modifications to our European facilities. In addition, under the Environmental Liability Directive, European Union member states can require the remediation of soil and groundwater contamination in certain circumstances, under the "polluter pays principle." We are unable to predict the impact these requirements and concepts may have on our future costs of compliance.

Contract Disputes with Goodrich and PolyOne. In connection with the 1990 and 1997 acquisitions of the Goodrich Corporation ("Goodrich") chemical manufacturing facility in Calvert City, Goodrich agreed to indemnify us for any liabilities related to preexisting contamination at the site. For our part, we agreed to indemnify Goodrich for post-closing contamination caused by our operations. The soil and groundwater at the site, which does not include our nearby PVC facility, had been extensively contaminated under Goodrich's operations. In 1993, Goodrich spun off the predecessor of PolyOne Corporation ("PolyOne"), and that predecessor assumed Goodrich's indemnification obligations relating to preexisting contamination.

In 2003, litigation arose among us, Goodrich and PolyOne with respect to the allocation of the cost of remediating contamination at the site. The parties settled this litigation in December 2007 and the case was dismissed. In the settlement the parties agreed that, among other things: (1) PolyOne would pay 100% of the costs (with specified exceptions), net of recoveries or credits from third parties, incurred with respect to environmental issues at the Calvert City site from August 1, 2007 forward; (2) either we or PolyOne might, from time to time in the future (but not more than once every five years), institute an arbitration proceeding to adjust that percentage; and (3) we and PolyOne would negotiate a new environmental remediation

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utilities and services agreement to cover our provision to, or on behalf of, PolyOne of certain environmental remediation services at the site. The current environmental remediation activities at the Calvert City site do not have a specified termination date but are expected to last for the foreseeable future. The costs incurred by us that have been invoiced to PolyOne to provide the environmental remediation services were \$2.2 million and \$2.8 million in 2015 and 2014, respectively. By letter dated March 16, 2010, PolyOne notified us that it was initiating an arbitration proceeding under the settlement agreement. In this proceeding, PolyOne sought to readjust the percentage allocation of costs and to recover approximately \$1.4 million from us in reimbursement of previously paid remediation costs. In December 2015, the arbitration panel dismissed the proceeding with prejudice. In a separate proceeding in Ohio state court, we are seeking certain insurance documents from PolyOne.

State Administrative Proceedings. There are several administrative proceedings in Kentucky involving us, Goodrich and PolyOne related to the same manufacturing site in Calvert City. In 2003, the Kentucky Environmental and Public Protection Cabinet (the "Cabinet") re-issued Goodrich's RCRA permit which requires Goodrich to remediate contamination at the Calvert City manufacturing site. Both Goodrich and PolyOne challenged various terms of the permit in an attempt to shift Goodrich's clean-up obligations under the permit to us. We intervened in the proceedings. The Cabinet has suspended all corrective action under the RCRA permit in deference to a remedial investigation and feasibility study ("RIFS") being conducted, under the auspices of the U.S. Environmental Protection Agency ("EPA"), pursuant to an Administrative Settlement Agreement ("AOC"), which became effective on December 9, 2009. See "Federal Administrative Proceedings" below. The proceedings have been postponed. Periodic status conferences will be held to evaluate whether additional proceedings will be required.

Federal Administrative Proceedings. In May 2009, the Cabinet sent a letter to the EPA requesting the EPA's assistance in addressing contamination at the Calvert City site under CERCLA. In its response to the Cabinet also in May 2009, the EPA stated that it concurred with the Cabinet's request and would incorporate work previously conducted under the Cabinet's RCRA authority into the EPA's cleanup efforts under CERCLA. Since 1983, the EPA has been addressing contamination at an abandoned landfill adjacent to our plant which had been operated by Goodrich and which was being remediated pursuant to CERCLA. The EPA has directed Goodrich and PolyOne to conduct additional investigation activities at the landfill and at our plant. In June 2009, the EPA notified us that we may have potential liability under section 107(a) of CERCLA at our plant site. Liability under section 107(a) of CERCLA is strict and joint and several. The EPA also identified Goodrich and PolyOne, among others, as potentially responsible parties at the plant site. We negotiated, in conjunction with the other potentially responsible parties, an AOC and an order to conduct a RIFS. On July 12, 2013, the parties submitted separate draft RIFS reports to the EPA. The EPA has hired a contractor to complete the remedial investigation report.

Monetary Relief. Except as noted above, with respect to the settlement of the contract litigation among us, Goodrich and PolyOne, none of the court, the Cabinet nor the EPA has established any allocation of the costs of remediation among the various parties that are involved in the judicial and administrative proceedings discussed above. At this time, we are not able to estimate the loss or reasonable possible loss, if any, on our financial statements that could result from the resolution of these proceedings. Any cash expenditures that we might incur in the future with respect to the remediation of contamination at the site would likely be spread out over an extended period. As a result, we believe it is unlikely that any remediation costs allocable to us will be material in terms of expenditures made in any individual reporting period.

Potential Flare Modifications. For several years, the EPA has been conducting an enforcement initiative against petroleum refineries and petrochemical plants with respect to emissions from flares. A number of companies have entered into consent agreements with the EPA requiring both modifications to reduce flare emissions and the installation of additional equipment to better track flare operations and emissions. On April 21, 2014, we received a Clean Air Act Section 114 Information Request from the EPA which sought information regarding flares at the Calvert City and Lake Charles facilities. The EPA has informed us that the information provided leads the EPA to believe that some of the flares are out of compliance with applicable standards. The EPA has demanded that we conduct additional flare sampling and provide supplemental information. We are currently in negotiations with the EPA regarding these demands. The EPA has indicated that it is seeking a consent decree that would obligate us to take corrective actions relating to the alleged noncompliance. We have not agreed that any flares are out of compliance or

that any corrective actions are warranted. Depending on the outcome of our negotiations with the EPA, additional controls on emissions from our flares may be required and these could result in increased capital and operating costs. Louisiana Notice of Violations. The Louisiana Department of Environmental Quality ("LDEQ") has issued notices of violations ("NOVs") regarding our assets for various air compliance issues. We are working with LDEQ to settle these claims, and a global settlement of all claims is being discussed. We have reached a verbal agreement with the LDEQ to settle certain of the NOVs in two separate settlements for a combined \$192,000 in civil penalties. We do not believe that any settlements for the remaining NOVs will have a material adverse effect on our financial condition, results of operations or cash flows.

Greenhouse Gases. Various jurisdictions have considered or adopted laws and regulations on greenhouse gas ("GHG") emissions, with the general aim of reducing such emissions. The EPA currently requires certain industrial facilities to report



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their GHG emissions, and to obtain permits with stringent control requirements before constructing or modifying new facilities with significant GHG emissions. In the European Union, the Emissions Trading Scheme obligates certain emitters to obtain GHG emission allowances to comply with a cap and trade system for GHG emissions. As our chemical manufacturing processes result in GHG emissions, these and other GHG laws and regulations could affect our costs of doing business.

**Chemical Safety.** Assessments under government programs on chemical safety could adversely affect our business by increasing our costs of production and reducing demand for our products, through new requirements on the production, handling, labeling or use of those chemicals. For example, in the European Union, the Regulation on Registration, Evaluation, Authorisation and Restriction of Chemicals ("REACH") is designed to identify the intrinsic properties of chemical substances, assess hazards and risks of the substances, and identify and implement risk management measures to protect humans and the environment. In the United States, the National Toxicology Program seeks to identify and select for study chemicals and other substances to evaluate potential human health hazards. General. It is our policy to comply with all environmental, health and safety requirements and to provide safe and environmentally sound workplaces for our employees. In some cases, compliance can be achieved only by incurring capital expenditures. In 2015, we made capital expenditures of \$21.4 million related to environmental compliance. We estimate that we will make capital expenditures of approximately \$24.1 million in 2016 and \$23.8 million in 2017, respectively, related to environmental compliance. Capital expenditures related to environmental compliance have been relatively higher in 2015 in large part due to EPA regulations and increasingly stringent requirements associated with environmental permits. We expect to incur further capital expenditures related to EPA regulations and requirements in 2016 and 2017. The remainder of the 2016 and 2017 estimated amounts are related to equipment replacement and upgrades. We anticipate that stringent environmental regulations will continue to be imposed on us and the industry in general. Although we cannot predict with certainty future expenditures, management believes that our current spending trends will continue.

It is difficult to estimate the future costs of environmental protection and remediation because of many uncertainties, including uncertainties about the status of laws, regulations and information related to individual locations and sites and our ability to rely on third parties to carry out such remediation. Subject to the foregoing, but taking into consideration our experience regarding environmental matters of a similar nature and facts currently known, and except for the outcome of pending litigation and regulatory proceedings, which we cannot predict, but which could have a material adverse effect on us, we believe that capital expenditures and remedial actions to comply with existing laws governing environmental protection will not have a material adverse effect on our business and financial results.

**Employees**

As of December 31, 2015, we had approximately 4,225 employees in the following areas:

Category	Number
Olefins segment	1,000
Vinyls segment	3,050
Corporate and other	175

Approximately 32% of our employees are represented by labor unions, and all of these union employees are working under collective bargaining agreements. In the United States, approximately 9% of our employees are represented by labor unions and are working under collective bargaining agreements that will expire in 2019. In Europe, we have multiple collective bargaining agreements, with varying expiration years, covering different groups of our work force. There have been no strikes or lockouts, and we have not experienced any work stoppages throughout our history. We believe that our relationship with our employees and unions is open and positive.

**Technology**

Historically, our technology strategy has been to selectively acquire licenses from third-parties, as well as develop our own proprietary technology. Our selection process incorporates many factors, including the cost of the technology, the ability to meet our customers' requirements, raw material and energy consumption rates, product quality, capital costs, maintenance requirements and reliability. Most of the technology licensed from third-party providers is perpetual and has been paid in full. We own an intellectual property portfolio developed from focused research in both process and product technology. After acquiring or developing a technology, we devote considerable effort to effectively employ

the technology and further its development, with a focus towards continuous improvement of our competitive positions.

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Conversely, we have selectively granted licenses to our patented Energx<sup>®</sup> technology for LLDPE production and for proprietary LDPE reactor mixing technology. We have also granted several licenses for EDC/VCM technology, including the direct chlorination process and catalyst, and S-PVC process and technology.

### Segment and Geographic Information

Information regarding sales, income from operations and assets attributable to our Olefins and Vinyls segments, and geographical information is presented in Note 23 to our consolidated financial statements included in Item 8 of this Form 10-K.

### Available Information

Our Web site address is [www.westlake.com](http://www.westlake.com). We make our Web site content available for information purposes only. It should not be relied upon for investment purposes, nor is it incorporated by reference in this Form 10-K. We make available on this Web site under "Investor Relations/SEC Filings," free of charge, our proxy statements, annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those materials as soon as reasonably practicable after we electronically file those materials with, or furnish those materials to, the SEC. The SEC also maintains a Web site at [www.sec.gov](http://www.sec.gov) that contains reports, proxy statements and other information regarding SEC registrants, including us.

We intend to satisfy the requirement under Item 5.05 of Form 8-K to disclose any amendments to our Code of Ethics and any waiver from a provision of our Code of Ethics by posting such information on our Web site at [www.westlake.com](http://www.westlake.com) under "Investor Relations/Corporate Governance."

### Item 1A. Risk Factors

Cyclicity in the petrochemical industry has in the past, and may in the future, result in reduced operating margins or operating losses.

Our historical operating results reflect the cyclical and volatile nature of the petrochemical industry. The industry is mature and capital intensive. Margins in this industry are sensitive to supply and demand balances both domestically and internationally, which historically have been cyclical. The cycles are generally characterized by periods of tight supply, leading to high operating rates and margins, followed by periods of oversupply primarily resulting from excess new capacity additions, leading to reduced operating rates and lower margins.

Moreover, profitability in the petrochemical industry is affected by the worldwide level of demand along with vigorous price competition which may intensify due to, among other things, new industry capacity. In general, weak economic conditions either in the United States, Europe or the rest of the world tend to reduce demand and put pressure on margins. It is not possible to predict accurately the supply and demand balances, market conditions and other factors that will affect industry operating margins in the future.

New olefins capacity additions in Asia, the Middle East and North America, a number of which have been announced in recent years, may lead to periods of over-supply and lower profitability. As a result, our Olefins segment operating margins may be negatively impacted.

Continued slow recovery in the U.S. construction markets and budgetary constraints in municipal spending have contributed to lower North American demand for our vinyls products. Likewise, European industry production capacities currently exceed demand in the region, largely due to the weak economic environment in Europe. Looking forward, our Vinyls segment operating rates and margins may continue to be negatively impacted by the slow recovery of the U.S. construction markets and the European economy.

We sell commodity products in highly competitive markets and face significant competition and price pressure.

We sell our products in highly competitive markets. Due to the commodity nature of many of our products, competition in these markets is based primarily on price and to a lesser extent on performance, product quality, product deliverability and customer service. As a result, we generally are not able to protect our market position for these products by product differentiation and may not be able to pass on cost increases to our customers. Accordingly, increases in raw material and other costs may not necessarily correlate with changes in prices for these products, either in the direction of the price change or in magnitude. Specifically, timing differences in pricing between raw material prices, which may change daily, and contract product prices, which in many cases are negotiated monthly or less often, sometimes with an additional lag in effective dates for increases, have had and may continue to have a negative

effect on profitability. Significant volatility in raw material costs tends to place pressure on product margins as sales price increases could lag behind raw material cost increases. Conversely, when raw material costs decrease, customers could seek relief in the form of lower sales prices.

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Volatility in costs of raw materials and energy may result in increased operating expenses and adversely affect our results of operations and cash flow.

Significant variations in the costs and availability of raw materials and energy may negatively affect our results of operations. These costs have risen significantly in the past due primarily to oil and natural gas cost increases. We purchase significant amounts of ethane feedstock, natural gas, ethylene and salt to produce several basic chemicals. We also purchase significant amounts of electricity to supply the energy required in our production processes. The cost of these raw materials and energy, in the aggregate, represents a substantial portion of our operating expenses. The prices of raw materials and energy generally follow price trends of, and vary with market conditions for, crude oil and natural gas, which are highly volatile and cyclical. Changes to regulatory policies applicable to the German energy sector for industrial users have contributed to higher prices for industrial users of energy in the future. Our results of operations have been and could in the future be significantly affected by increases in these costs.

Price increases increase our working capital needs and, accordingly, can adversely affect our liquidity and cash flow. In addition, because we utilize the first-in, first-out ("FIFO") method of inventory accounting, during periods of falling raw material prices and declining sales prices, our results of operations for a particular reporting period could be negatively impacted as the lower sales prices would be reflected in operating income more quickly than the corresponding drop in feedstock costs. We use derivative instruments in an attempt to reduce price volatility risk on some feedstock commodities. In the future, we may decide not to hedge any of our raw material costs or any hedges we enter into may not have successful results. Also, our hedging activities involve credit risk associated with our hedging counterparties, and a deterioration in the financial markets could adversely affect our hedging counterparties and their abilities to fulfill their obligations to us.

Lower prices of crude oil, such as those experienced since the third quarter of 2014 and continuing through 2015 (as of December 31, 2015, over 65% lower than their 2014 peak levels), have led to a reduction in the cost advantage for natural gas liquids-based ethylene crackers in North America, such as ours, as compared to naphtha-based ethylene crackers that use crude oil derivatives. As a result, our margins and cash flow have been and may continue to be negatively impacted. This impact could be magnified to the extent crude oil prices drop even further and depending on how long prices remain at these levels. Lower crude oil and natural gas prices could lead to a reduction in hydraulic fracturing in the United States, which could reduce the availability of feedstock and increase prices of feedstock for our operations. Higher natural gas prices could also adversely affect our ability to export products that we produce in the United States outside of the United States. In addition to the impact that this has on our exports from the United States, reduced competitiveness of U.S. producers also has in the past increased the availability of chemicals in North America, as U.S. production that would otherwise have been sold overseas was instead offered for sale domestically, resulting in excess supply and lower prices in North America. We could also face the threat of imported products from countries that have a cost advantage. Additionally, the export of natural gas liquids from the United States or greater restrictions on hydraulic fracturing could restrict the availability of our raw materials in the United States, thereby increasing our costs.

External factors beyond our control can cause fluctuations in demand for our products and in our prices and margins, which may negatively affect our results of operations and cash flow.

External factors beyond our control can cause volatility in raw material prices, demand for our products, product prices and volumes and deterioration in operating margins. These factors can also magnify the impact of economic cycles on our business and results of operations. Examples of external factors include:

- general economic conditions, including in the United States, Europe and Asia;
- new capacity additions in North America, Asia and the Middle East;
- the level of business activity in the industries that use our products;
- competitor action;
- technological innovations;
- currency fluctuations;
- increases in interest rates;
- international events and circumstances;
- war, terrorism and civil unrest;

governmental regulation, including in the United States, Europe and Asia;  
severe weather and natural disasters; and  
credit worthiness of customers and vendors.

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A number of our products are highly dependent on durable goods markets, such as housing and construction, which are themselves particularly cyclical. The significant weakening of the U.S. residential housing market since 2006 and continued economic weakness in Europe has had an adverse effect on demand and margins for our products. If the global economy worsens in general, or the U.S. residential housing market or the European economy worsens in particular, demand for our products and our income and cash flow could be adversely affected to an even greater degree.

We may reduce production at or idle a facility for an extended period of time or exit a business because of high raw material prices, an oversupply of a particular product and/or a lack of demand for that particular product, which makes production uneconomical. Temporary outages sometimes last for several quarters or, in certain cases, longer and cause us to incur costs, including the expenses of maintaining and restarting these facilities. Factors such as increases in raw material costs or lower demand in the future may cause us to further reduce operating rates, idle facilities or exit uncompetitive businesses.

Hostilities in the Middle East, the Commonwealth of Independent States (including Ukraine) or elsewhere or the occurrence, or threat of occurrence, of terrorist attacks could adversely affect the economies of the United States, Europe and other developed countries. A lower level of economic activity could result in a decline in demand for our products, which could adversely affect our net sales and margins and limit our future growth prospects. Volatility in prices for crude oil and natural gas could also result in increased feedstock costs. Furthermore, sustained lower prices of crude oil, such as the prices experienced since the third quarter of 2014 and continuing through 2015, have led and may continue to lead to lower margins in the United States. In addition, these risks could cause increased instability in the financial and insurance markets and could adversely affect our ability to access capital and to obtain insurance coverage that we consider adequate or is otherwise required by our contracts with third parties.

We operate internationally and are subject to related risks, including exchange rate fluctuations, exchange controls, political risk and other risks relating to international operations.

We operate internationally and are subject to the risks of doing business on a global basis. These risks include, but are not limited to, fluctuations in currency exchange rates, currency devaluations, imposition of trade barriers, imposition of tariffs and duties, restrictions on the transfer of funds, changes in law and regulatory requirements, involvement in judicial proceedings in unfavorable jurisdictions, economic instability and disruptions, political unrest and epidemics. Our operating results could be negatively affected by any of these risks.

A deterioration in global economic conditions may have a negative impact on our business and financial condition. A deterioration in global economic conditions, including continued economic weakness in Europe, may have a negative impact on our business and our financial condition. Our ability to access the capital markets may be severely restricted at a time when we would like, or need, to access such markets, which could have an impact on our flexibility to react to changing economic and business conditions. In addition, the availability of additional financing at cost effective interest rates cannot be assured. A deterioration in global economic conditions, including continued economic weakness in Europe, could have an impact on the lenders under our revolving credit facility or on our customers and suppliers, causing them to fail to meet their obligations to us. Additionally, a deterioration in global economic conditions could result in reduced demand for our products, which would have a negative impact on our revenues and profits. Further, reduced levels of accounts receivables and inventory may affect our credit facility borrowing base. Our credit facility allows us to borrow up to (1) 85% of the net amount of eligible accounts receivable, plus (2) the lesser of (a) 70% of the value of the lower of cost or market of eligible inventory, or (b) 85% of the appraised net orderly liquidation value of all eligible inventory, plus (3) 100% of cash held in an account with the agent under the credit facility and subject to a control agreement with the agent, minus (4) such reserves as the agent may establish. Europe's economic recovery has been slow relative to the United States. If Europe does not experience a meaningful economic recovery, it may have a continued negative effect on our European business. Our inability to compete successfully may reduce our operating profits.

The petrochemical industry is highly competitive. Historically, there have been a number of mergers, acquisitions, spin-offs and joint ventures in the industry. This restructuring activity has resulted in fewer but more competitive producers, many of which are larger than we are and have greater financial resources than we do. Among our competitors are some of the world's largest chemical companies and chemical industry joint ventures. Competition

within the petrochemical industry and in the manufacturing of building products is affected by a variety of factors, including:

• product price;

• technical support and customer service;

• quality;

• reliability of raw material and utility supply;



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availability of potential substitute materials; and  
product performance.

Changes in the competitive environment could have a material adverse effect on our business and our operations.

These changes could include:

- the emergence of new domestic and international competitors;
- the rate of capacity additions by competitors;
- changes in customer base due to mergers;
- the intensification of price competition in our markets;
- the introduction of new or substitute products by competitors; and
- the technological innovations of competitors.

Our production facilities process some volatile and hazardous materials that subject us to operating risks that could adversely affect our operating results.

We have four chemical manufacturing sites in the United States, six chemical manufacturing sites in Europe and one chemical manufacturing site in Asia. Our operations are subject to the usual hazards associated with chemical and plastics manufacturing and the related use, storage, transportation and disposal of feedstocks, products and wastes, including:

- pipeline leaks and ruptures;
- explosions;
- fires;
- severe weather and natural disasters;
- mechanical failure;
- unscheduled downtime;
- labor difficulties;
- transportation interruptions;
- chemical spills;
- discharges or releases of toxic or hazardous substances or gases;
- storage tank leaks;
- other environmental risks;
- terrorist attacks; and
- political unrest.

According to some experts, global climate change could result in heightened hurricane activity in the Gulf of Mexico and other weather and natural disaster hazards worldwide. If this materializes, severe weather and natural disaster hazards could pose an even greater risk for our facilities, particularly those in Louisiana.

All these hazards can cause personal injury and loss of life, catastrophic damage to or destruction of property and equipment and environmental damage, and may result in a suspension of operations and the imposition of civil or criminal penalties. We could become subject to environmental claims brought by governmental entities or third parties. A loss or shutdown over an extended period of operations at any one of our chemical manufacturing facilities would have a material adverse effect on us. We maintain property, business interruption and casualty insurance that we believe is in accordance with customary industry practices, but we cannot be fully insured against all potential hazards incident to our business, including losses resulting from war risks or terrorist acts. As a result of market conditions, premiums and deductibles for certain insurance policies can increase substantially and, in some instances, certain insurance may become unavailable or available only for reduced amounts of coverage. If we were to incur a significant liability for which we were not fully insured, it could have a material adverse effect on our financial position.

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We may pursue acquisitions, dispositions and joint ventures and other transactions that may impact our results of operations and financial condition.

We seek opportunities to maximize efficiency and create stockholder value through various transactions. These transactions may include various domestic and international business combinations, purchases or sales of assets or contractual arrangements or joint ventures that are intended to result in the realization of synergies, the creation of efficiencies or the generation of cash to reduce debt. In this regard, we regularly consider acquisition opportunities that would be consistent or complementary to our existing business strategies. To the extent permitted under our credit facility, the indenture governing our senior notes and other debt agreements, some of these transactions may be financed by additional borrowings by us. Although we would pursue these transactions because we expect them to yield longer-term benefits if the efficiencies and synergies we expect are realized, they could adversely affect our results of operations in the short term because of the costs associated with such transactions and because they may divert management's attention from existing business operations. Other transactions may advance future cash flows from some of our businesses, thereby yielding increased short-term liquidity, but consequently resulting in lower cash flows from these operations over the longer term. These transactions may not yield the business benefits, synergies or financial benefits anticipated by management. Integration of acquired operations can lead to restructuring charges or other costs. We may have difficulties integrating the operations of acquired businesses.

Our operations and assets are subject to extensive environmental, health and safety laws and regulations.

We use large quantities of hazardous substances and generate large quantities of hazardous wastes and emissions in our manufacturing operations. Due to the large quantities of hazardous substances and wastes, our industry is highly regulated and monitored by various environmental regulatory authorities. As such, we are subject to extensive international, national, state and local laws, regulations and directives pertaining to pollution and protection of the environment, health and safety, which govern, among other things, emissions to the air, discharges onto land or waters, the maintenance of safe conditions in the workplace, the remediation of contaminated sites, and the generation, handling, storage, transportation, treatment and disposal of waste materials. Some of these laws, regulations and directives are subject to varying and conflicting interpretations. Many of these laws, regulations and directives provide for substantial fines and potential criminal sanctions for violations and require the installation of costly pollution control equipment or operational changes to limit pollution emissions or reduce the likelihood or impact of hazardous substance releases, whether permitted or not. For example, all of our petrochemical facilities in the United States and Europe may require improvements to comply with certain changes in process safety management requirements.

New laws, rules and regulations as well as changes to laws, rules and regulations may also affect us. For example, on April 17, 2012, the EPA promulgated MACT standards for major sources and generally available control technology ("GACT") standards for area sources of PVC production. The rule sets emission limits and work practice standards for total organic air toxics and for three specific air toxics: vinyl chloride, chlorinated di-benzo dioxins and furans ("CD/DF"), and hydrogen chloride and includes requirements to demonstrate initial and continuous compliance with the emission standards. Similarly, the Toxic Substances Control Act ("TSCA") imposes reporting, record-keeping and testing requirements, and restrictions relating to the production, handling, and use of chemical substances. In December 2015, the U.S. Senate passed its version of a TSCA reform bill. The U.S. House of Representatives had previously passed a similar bill in June 2015. If the two bills are reconciled and TSCA reform becomes law, it could change the way TSCA applies or is applied to our operations. This law or future new, amended or proposed laws or rules may result in an increase in regulations, which could increase our costs or reduce our production, which could have a material adverse effect on our business, financial condition, operating results or cash flow. In addition, we cannot accurately predict future developments, such as increasingly strict environmental and safety laws or regulations, and inspection and enforcement policies, as well as resulting higher compliance costs, which might affect the handling, manufacture, use, emission, disposal or remediation of products, other materials or hazardous and non-hazardous waste, and we cannot predict with certainty the extent of our future liabilities and costs under environmental, health and safety laws and regulations. These liabilities and costs may be material.

Our operations produce GHG emissions, which have been the subject of increased scrutiny and regulation. In 2005, the Kyoto Protocol to the 1992 United Nations Framework Convention on Climate Change, which establishes a

binding set of emission targets for GHG emissions, became binding on the countries that had ratified it. In 2015, the United Nations Conference on Climate Change created the Paris Agreement, which will be open for signing on April 22, 2016. The Paris Agreement will require countries to review and "represent a progression" in their intended nationally determined contributions, which set GHG emission reduction goals, every five years beginning in 2020. Legislation to regulate GHG emissions has also been introduced in the United States Congress, and there has been a wide-ranging policy debate regarding the impact of these gases and possible means for their regulation. Some of the proposals would require industries to meet stringent new standards that would require substantial reductions in carbon emissions. Those reductions could be costly and difficult to implement.

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Various jurisdictions have considered or adopted laws and regulations on GHG emissions, with the general aim of reducing such emissions. The EPA currently requires certain industrial facilities to report their GHG emissions, and to obtain permits with stringent control requirements before constructing or modifying new facilities with significant GHG emissions. In the European Union, the Emissions Trading Scheme obligates certain emitters to obtain GHG emission allowances to comply with a cap and trade system for GHG emissions. As our chemical manufacturing processes result in GHG emissions, these and other GHG laws and regulations could affect our costs of doing business.

Under the IED, European Union member state governments are expected to adopt rules and implement environmental permitting programs relating to air, water and waste for industrial facilities. In this context, concepts such as BAT are being explored. Future implementation of these concepts may result in technical modifications in our European facilities. In addition, under the Environmental Liability Directive, European Union member states can require the remediation of soil and groundwater contamination in certain circumstances, under the "polluter pays principle." We are unable to predict the impact these requirements and concepts may have on our future costs of compliance. We also may face liability for alleged personal injury or property damage due to exposure to chemicals or other hazardous substances at our facilities or to chemicals that we otherwise manufacture, handle or own. Although these types of claims have not historically had a material impact on our operations, a significant increase in the success of these types of claims could have a material adverse effect on our business, financial condition, operating results or cash flow.

Environmental laws may have a significant effect on the nature and scope of, and responsibility for, cleanup of contamination at our current and former operating facilities, the costs of transportation and storage of raw materials and finished products, the costs of reducing emissions and the costs of the storage and disposal of wastewater. CERCLA, similar state laws and certain European directives impose joint and several liability for the costs of remedial investigations and actions on the entities that generated waste, arranged for disposal of the wastes, transported to or selected the disposal sites and the past and present owners and operators of such sites. All such potentially responsible parties (or any one of them, including us) may be required to bear all of such costs regardless of fault, legality of the original disposal or ownership of the disposal site. In addition, CERCLA, similar state laws and certain European directives could impose liability for damages to natural resources caused by contamination. Although we seek to take preventive action, our operations are inherently subject to accidental spills, discharges or other releases of hazardous substances that may make us liable to governmental entities or private parties. This may involve contamination associated with our current and former facilities, facilities to which we sent wastes or by-products for treatment or disposal and other contamination. Accidental discharges may occur in the future, future action may be taken in connection with past discharges, governmental agencies may assess damages or penalties against us in connection with any past or future contamination, or third parties may assert claims against us for damages allegedly arising out of any past or future contamination. In addition, we may be liable for existing contamination related to certain of our facilities for which, in some cases, we believe third parties are liable in the event such third parties fail to perform their obligations. For further discussion of such existing contamination, see Item 1, "Business—Environmental and Other Regulation."

Capital projects are subject to risks, including delays and cost overruns, which could have an adverse impact on our financial condition and results of operations.

We have announced capital expansion plans for our Lake Charles and Calvert City facilities. Expansion projects may be subject to delays or cost overruns, including delays or cost overruns resulting from any one or more of the following:

- unexpectedly long delivery times for, or shortages of, key equipment, parts or materials;
- shortages of skilled labor and other personnel necessary to perform the work;
- delays and performance issues;
- failures or delays of third-party equipment vendors or service providers;
- unforeseen increases in the cost of equipment, labor and raw materials;
- work stoppages and other labor disputes;
- unanticipated actual or purported change orders;

disputes with contractors and suppliers;  
design and engineering problems;  
latent damages or deterioration to equipment and machinery in excess of engineering estimates and assumptions;  
financial or other difficulties of our contractors and suppliers;  
interference from adverse weather conditions; and

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difficulties in obtaining necessary permits or in meeting permit conditions.

Significant cost overruns or delays could materially affect our financial condition and results of operations.

Additionally, capital expenditures for these projects could materially exceed our planned capital expenditures.

Our level of debt could adversely affect our ability to operate our business.

As of December 31, 2015, we had total outstanding debt of \$764.1 million, and our debt represented approximately 18% of our total capitalization. Our annual interest expense for 2015 was \$34.7 million, net of interest capitalized of \$10.4 million. Our level of debt and the limitations imposed on us by our existing or future debt agreements could have significant consequences on our business and future prospects, including the following:

a portion of our cash flow from operations will be dedicated to the payment of interest and principal on our debt and will not be available for other purposes, including the payment of dividends;

we may not be able to obtain necessary financing in the future for working capital, capital expenditures, acquisitions, debt service requirements or other purposes;

our less leveraged competitors could have a competitive advantage because they have greater flexibility to utilize their cash flow to improve their operations;

we may be exposed to risks inherent in interest rate fluctuations because some of our borrowings are at variable rates of interest, which would result in higher interest expense in the event of increases in interest rates;

we could be vulnerable in the event of a downturn in our business that would leave us less able to take advantage of significant business opportunities and to react to changes in our business and in market or industry conditions; and

should we pursue additional expansions of existing assets or acquisition of third party assets, we may not be able to obtain additional liquidity at cost effective interest rates.

These factors could be magnified or accelerated to the extent we were to finance future acquisitions with significant amounts of debt.

To service our indebtedness and fund our capital requirements, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control.

Our ability to make payments on and to refinance our indebtedness and to fund planned capital expenditures and pay cash dividends will depend on our ability to generate cash in the future, including any distributions that we may receive from Westlake Partners. This is subject to general economic, financial, currency, competitive, legislative, regulatory and other factors that are beyond our control.

Our business may not generate sufficient cash flow from operations, we may not receive sufficient distributions from Westlake Partners, currently anticipated cost savings and operating improvements may not be realized on schedule and future borrowings may not be available to us under our credit facility in an amount sufficient to enable us to pay our indebtedness or to fund our other liquidity needs. We also generate revenues denominated in currencies other than that of our indebtedness and may have difficulty converting those revenues into the currency of our indebtedness. We may need to refinance all or a portion of our indebtedness on or before maturity. In addition, we may not be able to refinance any of our indebtedness, including our credit facility and our senior notes, on commercially reasonable terms or at all. All of these factors could be magnified if we were to finance any future acquisitions with significant amounts of debt.

Our credit facility and the indenture governing our senior notes impose significant operating and financial restrictions, which may prevent us from capitalizing on business opportunities and taking some actions.

Our credit facility and the indenture governing our senior notes impose significant operating and financial restrictions on us. These restrictions limit our ability to:

pay dividends on, redeem or repurchase our capital stock;

make investments and other restricted payments;

incur additional indebtedness or issue preferred stock;

create liens;

permit dividend or other payment restrictions on our restricted subsidiaries;

sell all or substantially all of our assets or consolidate or merge with or into other companies;

engage in transactions with affiliates; and



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engage in sale-leaseback transactions.

These limitations are subject to a number of important qualifications and exceptions. However, the effectiveness of many of these restrictions in the indenture governing our senior notes is currently suspended under the indenture because our senior notes are currently rated investment grade by at least two nationally recognized credit rating agencies.

Our credit facility also requires us to maintain a minimum fixed charge coverage ratio or maintain a specified amount of availability under the credit facility to avoid certain restrictions. These covenants may adversely affect our ability to finance future business opportunities or acquisitions. A breach of any of these covenants could result in a default in respect of the related debt. If a default occurred, the relevant lenders could elect to declare the debt, together with accrued interest and other fees, to be immediately due and payable and proceed against any collateral securing that debt. In addition, any acceleration of debt under our credit facility will constitute a default under some of our other debt, including the indenture governing our senior notes.

Regulations concerning the transportation of hazardous chemicals and the security of chemical manufacturing facilities could result in higher operating costs.

Targets such as chemical manufacturing facilities may be at greater risk of terrorist attacks than other targets. As a result, the chemical industry responded to the issues surrounding the terrorist attacks of September 11, 2001 by implementing initiatives relating to the security of chemicals industry facilities and the transportation of hazardous chemicals. Simultaneously, local, state, national and international governments put into effect a regulatory process that led to new regulations impacting the security of chemical plant locations and the transportation of hazardous chemicals. Our business or our customers' businesses could be adversely affected because of the cost of complying with these regulations.

We may have difficulties integrating the operations of acquired businesses.

If we are unable to integrate or to successfully manage businesses that we have acquired or that we may acquire in the future, our business, financial condition and results of operations could be adversely affected. We may not be able to realize the operating efficiencies, synergies, cost savings or other benefits expected from the acquisitions for a number of reasons, including the following:

- we may fail to integrate the businesses we acquire into a cohesive, efficient enterprise;

our resources, including management resources, are limited and may be strained if we engage in a large acquisition or significant number of acquisitions, and acquisitions may divert our management's attention from initiating or carrying out programs to save costs or enhance revenues; and

our failure to retain key employees and contracts of the businesses we acquire.

Future acquisitions could lead to significant restructuring or other changes.

Regulations related to "conflict minerals" could adversely impact our business.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") contains provisions to improve transparency and accountability concerning the supply of certain minerals, known as conflict minerals, originating from the Democratic Republic of Congo and adjoining countries (collectively, the "Covered Countries").

The term "conflict minerals" encompasses tantalum, tin, tungsten (and their ores) and gold.

In August 2012, pursuant to the Dodd-Frank Act, the SEC adopted new annual disclosure and reporting requirements applicable to any company that files periodic public reports with the SEC, if any conflicts minerals are necessary to the functionality or production of a product manufactured, or contracted to be manufactured, by that company. These new annual reporting requirements require companies to describe reasonable country of origin inquiries, due diligence measures and the results of those activities and related determinations.

Because we have a highly complex, multi-layered supply chain, we may incur significant costs to comply with these requirements. In addition, the implementation of procedures to comply with these requirements could adversely affect the sourcing, supply and pricing of materials, including components, used in our products. Our suppliers (or suppliers to our suppliers) may not be able or willing to provide all requested information or to take other steps necessary to ensure that no conflict minerals financing or benefiting armed groups are included in materials or components supplied to us for our manufacturing purposes. Also, we may encounter challenges to satisfy customers that may



require all of the components of products purchased by them to be certified as conflict free. If we are not able to meet customer certification requirements, customers may choose to disqualify us as a supplier. In addition, since the applicability of the new conflict minerals requirements is limited to companies that file periodic reports with the SEC, not all of our competitors will need to comply with

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these requirements unless they are imposed by customers. As a result, those competitors may have cost and other advantages over us.

Our operations could be adversely affected by labor relations.

The vast majority of our employees in Europe, and some of our employees in the United States, are represented by labor unions and works councils. Our operations, particularly in Europe, may be adversely affected by strikes, work stoppages and other labor disputes.

We have unfunded pension plan liabilities related to our European operations.

We have certain non-U.S. defined benefit pension plans covering current and former employees associated with our European operations that we have not funded and are not obligated to fund under applicable law. As of December 31, 2015, the projected benefit obligation under these plans was approximately \$94.8 million. We will require future operating cash flow to fund these pension plan liabilities. We may not generate sufficient cash to satisfy these obligations.

The trading price of our common stock may negatively impact us.

Volatility in the capital and credit markets may cause downward pressure on stock prices and credit availability. The market value of our common stock is a factor in determining whether our goodwill is impaired. If the market value of our common stock declines significantly, it may result in an impairment of goodwill. A decline in the market value of our common stock could also negatively impact us in other ways, including making it more difficult for us to raise any equity capital.

Failure to adequately protect critical data and technology systems could materially affect our operations.

Information technology system failures, network disruptions and breaches of data security could disrupt our operations by causing delays or cancellation of customer orders, impede the manufacture or shipment of products or cause standard business processes to become ineffective, resulting in the unintentional disclosure of information or damage to our reputation. While we have taken steps to address these concerns by implementing network security and internal control measures, there can be no assurance that a system failure, network disruption or data security breach will not have a material adverse effect on our business, financial condition, operating results or cash flow.

Our property insurance has only partial coverage for acts of terrorism and, in the event of terrorist attack, we could lose net sales and our facilities.

As a result of the terrorist attacks of September 11, 2001 and other events, our insurance carriers created certain exclusions for losses from terrorism from our property insurance policies. While separate terrorism insurance coverage is available, premiums for full coverage are very expensive, especially for chemical facilities, and the policies are subject to high deductibles. Available terrorism coverage typically excludes coverage for losses from acts of war and from acts of foreign governments as well as nuclear, biological and chemical attacks. We have determined that it is not economically prudent to obtain full terrorism insurance, especially given the significant risks that are not covered by such insurance. Where feasible we have secured some limited terrorism insurance coverage on our property where insurers have included it in their overall programs. In the event of a terrorist attack impacting one or more of our facilities, we could lose the net sales from the facilities and the facilities themselves, and could become liable for any contamination or for personal or property damage due to exposure to hazardous materials caused by any catastrophic release that may result from a terrorist attack.

Westlake Partners' tax treatment depends on its status as a partnership for federal income tax purposes. We depend in part on distributions from Westlake Partners to generate cash for our operations, capital expenditures, debt service and other uses. If the Internal Revenue Service, or IRS, were to treat Westlake Partners as a corporation for federal income tax purposes, its cash available for distribution would be substantially reduced, which would also likely cause a substantial reduction in the value of its common units that we hold. Proposed regulations issued in May 2015 may make it difficult or impossible for Westlake Partners to maintain its status as a partnership after a ten-year transition period.

Despite the fact that Westlake Partners is organized as a limited partnership under Delaware law, it would be treated as a corporation for U.S. federal income tax purposes unless it satisfies a "qualifying income" requirement (the "Qualifying Income Exception") under Section 7704 of the Internal Revenue Code of 1986, as amended (the "Code"). Failing to meet the Qualifying Income Exception would cause Westlake Partners to be treated as a corporation for

U.S. federal income tax purposes.

Prior to its initial public offering, Westlake Partners requested and obtained a favorable private letter ruling from the IRS to the effect that income from the production, transportation, storage and marketing of ethylene and its co-products constitutes

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"qualifying income" within the meaning of Section 7704 of the Code. Failing to meet the Qualifying Income Exception or a change in current law could cause Westlake Partners to be treated as a corporation for U.S. federal income tax purposes.

On May 5, 2015, the IRS issued proposed regulations (the "Proposed Regulations") regarding qualifying income under Section 7704(d)(1)(E) of the Code. The Proposed Regulations provide industry-specific rules regarding the Qualifying Income Exception, including whether an activity constitutes the processing or refining of a natural resource, which limit the extent to which income generated from the processing and refining of products derived from crude oil and natural gas constitutes qualifying income. In the event the Proposed Regulations become final in their current form and an activity does not satisfy the Qualifying Income Exception standards set forth therein, the Proposed Regulations include a proposed ten-year transition period for partnerships like Westlake Partners, who already received a private letter ruling that the income from that activity was qualifying income. The U.S. Treasury Department and the IRS requested comments from industry participants regarding the standards set forth in the Proposed Regulations. Westlake Partners has timely submitted its comments and has had discussions with the IRS and the U.S. Treasury Department. If the Proposed Regulations become final in their current form, such final regulations would make it difficult or impossible for Westlake Partners to satisfy the Qualifying Income Exception after the proposed ten-year transition period. The market price of Westlake Partners common units may decline significantly following, or in anticipation of, the expiration of any transition period.

We will be controlled by our principal stockholder and its affiliates as long as they own a majority of our common stock, and our other stockholders will be unable to affect the outcome of stockholder voting during that time. Our interests may conflict with those of the principal stockholder and its affiliates, and we may not be able to resolve these conflicts on terms possible in arms-length transactions.

As long as TTWF LP (the "principal stockholder") and its affiliates (the "principal stockholder affiliates") own a majority of our outstanding common stock, they will be able to exert significant control over us, and our other stockholders, by themselves, will not be able to affect the outcome of any stockholder vote. As a result, the principal stockholder, subject to any fiduciary duty owed to our minority stockholders under Delaware law, will be able to control all matters affecting us (some of which may present conflicts of interest), including:

- the composition of our Board of Directors and, through the Board, any determination with respect to our business direction and policies, including the appointment and removal of officers and the determination of compensation;
- any determinations with respect to mergers or other business combinations or the acquisition or disposition of assets;
- our financing decisions, capital raising activities and the payment of dividends; and
- amendments to our amended and restated certificate of incorporation or amended and restated bylaws.

The principal stockholder will be permitted to transfer a controlling interest in us without being required to offer our other stockholders the ability to participate or realize a premium for their shares of common stock. A sale of a controlling interest to a third party may adversely affect the market price of our common stock and our business and results of operations because the change in control may result in a change of management decisions and business policy. Because we have elected not to be subject to Section 203 of the General Corporation Law of the State of Delaware, the principal stockholder may find it easier to sell its controlling interest to a third party than if we had not so elected.

In addition to any conflicts of interest that arise in the foregoing areas, our interests may conflict with those of the principal stockholder affiliates in a number of other areas, including:

- business opportunities that may be presented to the principal stockholder affiliates and to our officers and directors associated with the principal stockholder affiliates, and competition between the principal stockholder affiliates and us within the same lines of business;
- the solicitation and hiring of employees from each other; and
- agreements with the principal stockholder affiliates relating to corporate services that may be material to our business.

We may not be able to resolve any potential conflicts with the principal stockholder affiliates, and even if we do, the resolution may be less favorable than if we were dealing with an unaffiliated party, particularly if the conflicts are resolved while we are controlled by the principal stockholder affiliates. Our amended and restated certificate of incorporation provides that the principal stockholder affiliates have no duty to refrain from engaging in activities or

lines of business similar to ours and that the principal stockholder affiliates will not be liable to us or our stockholders for failing to present specified corporate opportunities to us.

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Cautionary Statements about Forward Looking Statements

The Private Securities Litigation Reform Act of 1995 provides safe harbor provisions for forward-looking information. Certain of the statements contained in this Form 10-K are forward-looking statements. All statements, other than statements of historical facts, included in this Form 10-K that address activities, events or developments that we expect, project, believe or anticipate will or may occur in the future are forward-looking statements.

Forward-looking statements can be identified by the use of words such as "believes," "intends," "may," "should," "could," "anticipates," "expected" 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 cannot give any assurances that these expectations will prove to be correct. Forward-looking statements relate to matters such as:

- future operating rates, margins, cash flow and demand for our products;
- industry market outlook, including the price of crude oil;
- production capacities;
- currency devaluation;
- our ability to borrow additional funds under our credit facility;
  - our ability to meet our liquidity needs;
- our ability to meet debt obligations under our debt instruments;
- our intended quarterly dividends;
- future capacity additions and expansions in the industry;
- timing, funding and results of capital projects, such as the expansion programs at our Lake Charles and Calvert City facilities;
- results of acquisitions;
- health of our customer base;
- pension plan obligations, funding requirements and investment policies;
- compliance with present and future environmental regulations and costs associated with environmentally related penalties, capital expenditures, remedial actions and proceedings, including any new laws, regulations or treaties that may come into force to limit or control carbon dioxide and other GHG emissions or to address other issues of climate change;
- effects of pending legal proceedings; and
- timing of and amount of capital expenditures.

We have based these statements on assumptions and analyses in light of our experience and perception of historical trends, current conditions, expected future developments and other factors we believe were appropriate in the circumstances when the statements were made. Forward-looking statements by their nature involve substantial risks and uncertainties that could significantly impact expected results, and actual future results could differ materially from those described in such statements. While it is not possible to identify all factors, we continue to face many risks and uncertainties. Among the factors that could cause actual future results to differ materially are the risks and uncertainties discussed under "Risk Factors" and those described from time to time in our other filings with the SEC including, but not limited to, the following:

- general economic and business conditions;
- the cyclical nature of the chemical industry;
- the availability, cost and volatility of raw materials and energy;
- uncertainties associated with the United States, European and worldwide economies, including those due to political tensions and unrest in the Middle East, the Commonwealth of Independent States (including Ukraine) and elsewhere;
- current and potential governmental regulatory actions in the United States, Europe and Asia and regulatory actions and political unrest in other areas;
- industry production capacity and operating rates;
- the supply/demand balance for our products;
- competitive products and pricing pressures;
- instability in the credit and financial markets;



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• access to capital markets;  
 • terrorist acts;  
 • operating interruptions (including leaks, explosions, fires, weather-related incidents, mechanical failure, unscheduled downtime, labor difficulties, transportation interruptions, spills and releases and other environmental risks);  
 • changes in laws or regulations;  
 • technological developments;  
 • our ability to integrate acquired businesses;  
 • foreign currency exchange risks;  
 • our ability to implement our business strategies; and  
 • creditworthiness of our customers.

Many of such factors are beyond our ability to control or predict. Any of the factors, or a combination of these factors, could materially affect our future results of operations and the ultimate accuracy of the forward-looking statements. These forward-looking statements are not guarantees of our future performance, and our actual results and future developments may differ materially from those projected in the forward-looking statements. Management cautions against putting undue reliance on forward-looking statements or projecting any future results based on such statements or present or prior earnings levels. Every forward-looking statement speaks only as of the date of the particular statement, and we undertake no obligation to publicly update or revise any forward-looking statements.

## Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

Our manufacturing facilities and principal products are set forth below. Except as noted, we own each of these facilities.

Location	Principal Products
Lake Charles, Louisiana	Ethylene, polyethylene, styrene
Longview, Texas <sup>(1)</sup>	Polyethylene, polyethylene wax
Calvert City, Kentucky <sup>(2)</sup>	PVC, VCM, EDC, chlorine, caustic soda, ethylene
Geismar, Louisiana	PVC, VCM, EDC, chlorine, caustic soda
Gendorf, Bavaria, Germany <sup>(1)</sup>	PVC, VCM, EDC, chlorine, caustic soda
Burghausen, Bavaria, Germany <sup>(1)</sup>	PVC
Knapsack, North Rhine-Westphalia, Germany <sup>(1)</sup>	PVC, VCM, EDC, chlorine, caustic soda
Cologne, North Rhine-Westphalia, Germany <sup>(1)</sup>	PVC
Schkopau, Saxony-Anhalt, Germany <sup>(1)</sup>	PVC
Hillhouse, Lancashire, United Kingdom <sup>(1)</sup>	PVC
Suzhou, Jiangsu, in the People's Republic of China <sup>(1)</sup>	PVC, PVC film and sheet
Booneville, Mississippi	PVC pipe
Greensboro, Georgia	PVC pipe
Janesville, Wisconsin	PVC pipe
Leola, Pennsylvania	PVC pipe
Wichita Falls, Texas	PVC pipe
Yucca, Arizona	PVC pipe
Lodi, California	PVC pipe and fittings
McPherson, Kansas	PVC pipe and fittings
Evansville, Indiana	Fence and deck components
Calgary, Alberta, Canada <sup>(3)</sup>	Window and door components

(1) We lease the land on which our facilities are located. The Suzhou facility is our 95% owned Asian joint venture.





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(2) We lease a portion of the land on which our Calvert City facility is located.

(3) We lease our Calgary land and building.

Olefins

Our Lake Charles site consists of three tracts on approximately 1,700 acres in Lake Charles, each within three miles of one another. The site includes two ethylene plants, which are owned by OpCo, two polyethylene plants and a styrene monomer plant. The combined capacity of OpCo's two Lake Charles ethylene plants is approximately 2.7 billion pounds per year. The capacity of our two polyethylene plants is approximately 1.5 billion pounds per year and the capacity of our styrene plant is approximately 570 million pounds per year. One of our polyethylene plants has two production units that use gas phase technology with the capability to manufacture both LLDPE and HDPE. OpCo currently plans to begin the upgrade and capacity expansion of its Petro 1 ethylene unit at our Lake Charles site in the second quarter of 2016.

Our Lake Charles site includes a marine terminal that provides for worldwide shipping capabilities. The site also is located near rail transportation facilities, which allows for efficient delivery of raw materials and prompt shipment of our products to customers. In addition, the site is connected by pipeline systems to our ethylene feedstock sources in both Texas and Louisiana. Within the site, OpCo's ethylene plants are connected by pipeline systems to our polyethylene and styrene plants.

Our Longview site consists of three polyethylene plants, a specialty polyethylene wax plant, and a 200-mile ethylene pipeline owned by OpCo that runs from Mont Belvieu to our Longview site. The plants are located inside a large Eastman Chemical Company ("Eastman") facility where Eastman produces a number of other chemical products. We can access ethylene to support our polyethylene operations either by purchasing ethylene from Eastman at the site or by transporting ethylene from OpCo's Lake Charles plant into the Gulf Coast grid and by transporting ethylene through our ethylene pipeline into our Longview facility. The technologies we use to produce polyethylene at Longview are similar to the technologies that we employ at Lake Charles. The Longview facility has a total capacity of 1.1 billion pounds per year.

Vinyls

Our Calvert City site is situated on approximately 750 acres on the Tennessee River in Kentucky and includes an ethylene plant, which is owned by OpCo, a chlor-alkali plant, a VCM plant and a PVC plant. The capacity of OpCo's Calvert City ethylene plant is 630 million pounds per year and the capacity of our chlor-alkali plant is 550 million pounds of chlorine and 605 million pounds of caustic soda per year. Our chlorine plant utilizes efficient, state-of-the-art membrane technology. Our VCM plant has a capacity of 1.3 billion pounds per year and our Calvert City PVC plant has a capacity of 1.3 billion pounds per year. In January 2016, OpCo announced an expansion project to increase the ethylene capacity of its ethylene plant at our Calvert City facility. The expansion is expected to increase ethylene capacity by approximately 70 million pounds annually and is targeted for completion during the first half of 2017. Combined with other incremental capacity increases, the total ethylene capacity of OpCo's ethylene plant is expected to increase to 730 million pounds annually at the completion of this project.

Our vinyls facility in Geismar is situated on 184 acres on the Mississippi River and includes a chlor-alkali plant, a VCM plant and a PVC plant. Our Geismar chlor-alkali plant is designed to produce up to 700 million pounds of chlorine and 770 million pounds of caustic soda per year. Our chlorine plant utilizes efficient, state-of-the-art membrane technology. Our Geismar VCM plant has a capacity of 550 million pounds per year, and our Geismar PVC plant has a capacity of 600 million pounds per year.

Our European vinyls manufacturing sites consist of five facilities in Germany and one facility in the United Kingdom, and include two state-of-the-art membrane chlor-alkali plants, two VCM plants and six PVC plants. The chlor-alkali plants have a combined capacity of 950 million pounds of chlorine and 1.0 billion pounds of caustic soda per year, the VCM plants have a combined capacity of 1.5 billion pounds per year and the PVC plants have a combined capacity of 1.7 billion pounds per year.

Our Asian vinyls manufacturing site is located near Shanghai, in the People's Republic of China and includes a PVC plant and a PVC film and sheet plant. The PVC plant has a capacity of 300 million pounds per year.

As of February 17, 2016, we owned 11 building products plants, consisting of eight PVC pipe plants, two profile plants producing PVC fence, decking, windows and door profiles and one film and sheet plant. The majority of our

plants are strategically located near major markets and serve customers throughout the United States, Canada and Asia. The combined capacity of our building product plants is 1.3 billion pounds per year. We believe our current facilities and announced expansions are adequate to meet the requirements of our present and foreseeable future operations.

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Headquarters

Our principal executive offices are located in Houston, Texas. Our office space is leased, at market rates, from an affiliate of our principal stockholder. See Note 18 to the audited consolidated financial statements appearing elsewhere in this Form 10-K and "Certain Relationships and Related Transactions" in our proxy statement to be filed with the SEC pursuant to Regulation 14A with respect to our 2016 annual meeting of stockholders (the "Proxy Statement").

Item 3. Legal Proceedings

In addition to the matters described under Item 1, "Business—Environmental and Other Regulation," we are involved in various legal proceedings incidental to the conduct of our business. We do not believe that any of these legal proceedings will have a material adverse effect on our financial condition, results of operations or cash flows.

Item 4. Mine Safety Disclosure

Not Applicable.

Executive Officers of the Registrant

James Chao (age 68). Mr. Chao has been our Chairman of the Board of Directors since July 2004 and became a director in June 2003. From May 1996 to July 2004, he served as our Vice Chairman. Mr. Chao also has responsibility for the oversight of our Vinyls business. Mr. Chao has over 45 years of global experience in the chemical industry. In addition, Mr. Chao has been the Chairman of the Board of Westlake Partners' general partner since its formation in March 2014. From June 2003 until November 2010, Mr. Chao was the executive chairman of Titan Chemicals Corp. Bhd. He has served as a Special Assistant to the Chairman of China General Plastics Group and worked in various financial, managerial and technical positions at Mattel Incorporated, Developmental Bank of Singapore, Singapore Gulf Plastics Pte. Ltd. and Gulf Oil Corporation. Mr. Chao, along with his brother Albert Chao, assisted their father T.T. Chao in founding Westlake Chemical Corporation. Mr. Chao is on the board of Baylor College of Medicine and KIPP (Knowledge Is Power Program). Mr. Chao received his B.S. degree from Massachusetts Institute of Technology and an M.B.A. from Columbia University.

Albert Chao (age 66). Mr. Chao has been our President since May 1996 and a director since June 2003. Mr. Chao became our Chief Executive Officer in July 2004. Mr. Chao has over 40 years of global experience in the chemical industry. In 1985, Mr. Chao assisted his father T.T. Chao and his brother James Chao in founding Westlake Chemical Corporation, where he served as Executive Vice President until he succeeded James Chao as President. In addition, Mr. Chao has been the President, Chief Executive Officer and a director of Westlake Partners' general partner since its formation in March 2014. He has held positions in the Controller's Group of Mobil Oil Corporation, in the Technical Department of Hercules Incorporated, in the Plastics Group of Gulf Oil Corporation and has served as Assistant to the Chairman of China General Plastics Group and Deputy Managing Director of a plastics fabrication business in Singapore. Mr. Chao is a trustee of Rice University. Mr. Chao received a bachelor's degree from Brandeis University and an M.B.A. from Columbia University.

M. Steven Bender (age 59). Mr. Bender has been our Senior Vice President, Chief Financial Officer and Treasurer since February 2008. From February 2007 to February 2008, Mr. Bender served as our Vice President, Chief Financial Officer and Treasurer and from June 2005 to February 2007, he served as our Vice President and Treasurer. In addition, Mr. Bender has been the Senior Vice President, Chief Financial Officer and a director of Westlake Partners' general partner since its formation in March 2014, and its Treasurer since April 2015. From June 2002 until June 2005, Mr. Bender served as Vice President and Treasurer of KBR, Inc., and from 1996 to 2002 he held the position of Assistant Treasurer for Halliburton Company. Prior to that, he held various financial positions within that company. Additionally, he was employed by Texas Eastern Corporation for over a decade in a variety of increasingly responsible audit, finance and treasury positions. Mr. Bender received a Bachelor of Business Administration from Texas A&M University and an M.B.A. from Southern Methodist University. Mr. Bender is also a Certified Public Accountant.

Robert F. Buesinger (age 59). Mr. Buesinger has been our Senior Vice President, Vinyls since joining us in April 2010. Prior to joining us, Mr. Buesinger served as the General Manager and President of Chevron Phillips Chemical Company L.P.'s Performance Pipe Division from February 2010 to March 2010. From June 2008 to January 2010, Mr. Buesinger held the position of General Manager in the Alpha Olefins and Poly Alpha Olefins business of Chevron Phillips Chemical Company L.P. From April 2005 to May 2008, he served as the President and Managing Director of Chevron Phillips Singapore Chemicals Pte. Ltd. and Asia Region General Manager for Chevron Phillips Chemical Company L.P. Prior to that, he held various technical and sales management positions within that company. Mr. Buesinger holds a B.S. in Chemical Engineering from Tulane University.

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Michael J. Mattina (age 53). Mr. Mattina has been our Senior Vice President, Polyethylene since April 2015. From March 2011 to March 2015, Mr. Mattina served as our Vice President and General Manager of North American Pipe and Specialty Products. From April 2008 to February 2011, Mr. Mattina served as our Vice President, Polyethylene and Specialty Products. From June 2005 to March 2008, he served as Director, Polyethylene Sales, Marketing and Technical Service. From October 2001 to May 2005, Mr. Mattina served in a variety of sales and marketing management assignments with us. Prior to joining Westlake, Mr. Mattina held various polyethylene business management, marketing and sales positions within Chevron Phillips Chemical Company and ExxonMobil Chemical Company. Mr. Mattina received a Bachelor of Business Administration in Finance with a minor in Chemistry from Stephen F. Austin University.

Lawrence E. (Skip) Teel (age 57). Mr. Teel has been our Senior Vice President, Olefins since July 2014. In addition, Mr. Teel has been the Senior Vice President, Olefins of Westlake Partners' general partner since July 2014. From July 2012 to July 2014, Mr. Teel served as our Vice President, Olefins. Mr. Teel joined us in September 2009 as Director, Olefins and Feedstock after a 23-year career with Lyondell Chemical Company where he served as the Vice President, Refining from August 2006 to May 2008. From 2001 to 2006, Mr. Teel held the position of Director, Corporate Planning and Business Development at Lyondell Chemical Company. During his career, he has held a variety of marketing, operations and general management assignments. Mr. Teel received a B.S. in Chemical Engineering from New Mexico State University and an M.S. in Finance from the University of Houston.

L. Benjamin Ederington (age 45). Mr. Ederington has been our Vice President, General Counsel, Chief Administrative Officer and Corporate Secretary since December 2015. Mr. Ederington served as our Vice President, General Counsel and Corporate Secretary from October 2013 to December 2015. In addition, Mr. Ederington has been the Vice President, General Counsel, Corporate Secretary and a director of Westlake Partners' general partner since its formation in March 2014. Prior to joining Westlake, he held a variety of senior legal positions at LyondellBasell Industries, N.V. and its predecessor companies, LyondellBasell Industries AF SCA and Lyondell Chemical Company, including most recently as Associate General Counsel, Commercial & Strategic Transactions from March 2010 to September 2013 and interim Director of Government Affairs from March 2010 to April 2011. He began his legal career more than 19 years ago at the law firm of Steptoe & Johnson, LLP. Mr. Ederington holds a B.A. from Yale University and received his J.D. from Harvard University.

Andrew Kenner (age 51). Mr. Kenner has been our Vice President, Manufacturing since July 2008. Mr. Kenner joined us after a 19-year career at Valero Energy Corporation where he served as Vice President and General Manager of Valero's Delaware City Refinery from September 2005 to July 2008. From August 2004 to September 2005, Mr. Kenner held the position of Vice President and General Manager of Valero's Houston Refinery. Mr. Kenner holds a B.S. in Aerospace Engineering from Texas A&M University and a M.S. in Chemical Engineering from the University of Texas at Austin.

George J. Mangieri (age 65). Mr. Mangieri has been our Vice President and Chief Accounting Officer since February 2007. From April 2000 to February 2007, he was Vice President and Controller. In addition, Mr. Mangieri has been the Vice President and Chief Accounting Officer of Westlake Partners' general partner since its formation in March 2014. Prior to joining us, Mr. Mangieri served as Vice President and Controller of Zurn Industries, Inc. from 1998 to 2000. He previously was employed as Vice President and Controller for Imo Industries, Inc. in New Jersey, and spent over 10 years in public accounting with Ernst & Young LLP, where he served as Senior Manager. He received his Bachelor of Science degree from Monmouth College and is a Certified Public Accountant.

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## PART II

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

## Price Range of Common Stock

As of February 17, 2016, there were 42 holders of record of our common stock. Our common stock is listed on the New York Stock Exchange under the symbol "WLK." Set forth below are the high and low closing prices for our common stock, as reported on the New York Stock Exchange composite tape for the periods indicated and the cash dividends declared in these periods.

	High	Low	Cash Dividends Declared
Year Ended December 31, 2015			
4th Quarter	\$62.09	\$52.86	\$0.1815
3rd Quarter	66.69	49.82	0.1815
2nd Quarter	78.59	67.98	0.1650
1st Quarter	72.49	55.20	0.1650
Year Ended December 31, 2014			
4th Quarter	\$83.43	\$53.67	\$0.1650
3rd Quarter	97.96	84.22	0.1650
2nd Quarter	84.77	62.36	0.1260
1st Quarter	68.73	57.66	0.1260

Our credit facility and the indenture governing our senior notes restrict our ability to pay dividends or other distributions on our equity securities. However, the effectiveness of these restrictions in the indenture governing the senior notes is currently suspended because the senior notes are currently rated investment grade by at least two nationally recognized credit rating agencies. See "Management's Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources—Debt" for additional information.

## Issuer Purchases of Equity Securities

The following table provides information on our purchase of equity securities during the quarter ended December 31, 2015:

Period	Total Number of Shares Purchased	Average Price Paid Per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs <sup>(1)</sup>	Maximum Number (or Approximate Dollar Value) of Shares that May Yet Be Purchased Under the Plans or Programs <sup>(1)</sup>
October 2015	288,161	\$55.33	288,161	\$ 113,533,000
November 2015	327,283	\$59.46	327,283	\$ 244,073,000
December 2015	111,741	\$54.53	111,174	\$ 238,012,000
Total	727,185	\$56.27	726,618	

(1) In November 2014, our Board of Directors approved a \$250.0 million stock repurchase program (the "2014 Program"). On November 20, 2015, our Board of Directors approved the expansion of the 2014 Program by an additional \$150.0 million. As of December 31, 2015, 2,682,489 shares of our common stock had been acquired at an aggregate purchase price of approximately \$162.0 million under the 2014 Program. Transaction fees and commissions are not reported in the average price paid per share in the table above. Decisions regarding the amount and the timing of purchases under the 2014 Program will be influenced by our cash on hand, our cash flow

from operations, general market conditions and other factors. The 2014 Program may be discontinued by our Board of Directors at any time.



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## Equity Compensation Plan Information

Securities authorized for issuance under equity compensation plans are as follows:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	1,766,662	\$21.58	5,733,600
Equity compensation plans not approved by security holders	N/A	N/A	N/A
Total	1,766,662	\$21.58	5,733,600

Other information regarding our equity compensation plans is set forth in the section entitled "Executive Compensation" in our Proxy Statement, which information is incorporated herein by reference.

Table of ContentsItem 6. Selected Financial and Operational Data <sup>(1)</sup>

	Year Ended December 31,				
	2015	2014	2013	2012	2011
	(dollars in thousands, except share amounts, per share data and volume data)				
Statement of Operations Data:					
Net sales	\$4,463,336	\$4,415,350	\$3,759,484	\$3,571,041	\$3,619,848
Gross profit	1,185,191	1,317,350	1,101,438	736,960	559,006
Selling, general and administrative expenses	225,364	193,359	147,974	121,609	112,210
Income from operations	959,827	1,123,991	953,464	615,351	446,796
Interest expense	(34,656)	(37,352)	(18,082)	(43,049)	(50,992)
Debt retirement costs	—	—	—	(7,082)	—
Gain from sales of equity securities	—	—	—	16,429	—
Other income (expense), net <sup>(2)</sup>	38,270	(2,721)	6,790	3,520	5,628
Income before income taxes	963,441	1,083,918	942,172	585,169	401,432
Provision for income taxes	298,396	398,902	331,747	199,614	142,466
Net income	665,045	685,016	610,425	385,555	258,966
Net income attributable to noncontrolling interests	19,035	6,493	—	—	—
Net income attributable to Westlake Chemical Corporation	\$646,010	\$678,523	\$610,425	\$385,555	\$258,966
Earnings Per Share Attributable to Westlake Chemical Corporation: <sup>(3)</sup>					
Basic	\$4.88	\$5.09	\$4.57	\$2.89	\$1.95
Diluted	\$4.86	\$5.07	\$4.55	\$2.88	\$1.94
Weighted average shares outstanding <sup>(3)</sup>					
Basic	131,823,707	133,111,230	133,224,256	132,578,858	131,854,842
Diluted	132,301,812	133,643,414	133,779,250	133,282,990	132,600,316
Balance Sheet Data (end of period):					
Cash and cash equivalents	\$662,525	\$880,601	\$461,301	\$790,078	\$825,901
Marketable securities	520,144	—	239,388	124,873	—
Restricted cash	—	—	—	—	96,283
Working capital <sup>(4)</sup>	1,652,547	1,474,107	1,244,224	1,352,903	1,391,561
Total assets	5,575,252	5,213,990	4,060,909	3,412,196	3,266,821
Total debt	764,115	763,997	763,879	763,761	764,563
Total Westlake Chemical Corporation stockholders' equity	3,265,878	2,911,511	2,418,603	1,872,256	1,756,312
Cash dividends declared per share <sup>(3) (5)</sup>	\$0.6930	\$0.5820	\$0.4125	\$2.1363	\$0.1373
Other Operating Data:					
Cash flow from:					
Operating activities	\$1,078,836	\$1,032,376	\$752,729	\$612,087	\$358,935
Investing activities	(1,006,176)	(773,205)	(1,002,238)	(466,971)	(202,785)
Financing activities	(286,812)	164,640	(79,268)	(180,939)	39,452
Depreciation and amortization	245,757	208,486	157,808	144,541	131,397
Capital expenditures	491,426	431,104	679,222	386,882	176,843
EBITDA <sup>(6)</sup>	1,243,854	1,329,756	1,118,062	772,759	583,821



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	Year Ended December 31,				
	2015	2014	2013	2012	2011
	(dollars in thousands, except share amounts, per share data and volume data)				
External Sales Volume (millions of pounds):					
Olefins Segment					
Polyethylene	2,445	2,364	2,244	2,230	2,272
Styrene, feedstock and other	1,182	941	1,094	925	753
Vinyls Segment					
PVC, caustic soda and other	5,026	3,174	1,995	1,822	1,749
Building products	629	572	487	423	403

The historical selected financial and operational data should be read together with Item 7, Management's (1) Discussion and Analysis of Financial Condition and Results of Operations, and Item 8, Financial Statements and Supplementary Data included in this Form 10-K.

Other income (expense), net is composed of interest income, income or loss from equity method investments, (2) dividend income, gains or losses from sales of securities, foreign exchange currency gains or losses, gain on acquisition, impairment of equity method investments, management fee income and other gains and losses.

On February 14, 2014, our Board of Directors authorized a two-for-one split of our common stock. Stockholders of record as of February 28, 2014 were entitled to one additional share for every share outstanding, which was (3) distributed on March 18, 2014. All share amounts and per share data for the years prior to December 31, 2014 have been restated to reflect the effect of the two-for-one stock split.

(4) Working capital equals current assets less current liabilities.

(5) Cash dividends declared for the year ended December 31, 2012 includes a special dividend of \$1.875 per share (on a post-split basis) paid on December 12, 2012.

(6) EBITDA (a non-GAAP financial measure) is calculated as net income before interest expense, income taxes, depreciation and amortization. The body of accounting principles generally accepted in the United States is commonly referred to as "GAAP." For this purpose a non-GAAP financial measure is generally defined by the SEC as one that purports to measure historical and future financial performance, financial position or cash flows, but excludes or includes amounts that would not be so adjusted in the most comparable GAAP measures. We have included EBITDA in this Form 10-K because our management considers it an important supplemental measure of our performance and believes that it is frequently used by securities analysts, investors and other interested parties in the evaluation of companies in our industry, some of which present EBITDA when reporting their results. We regularly evaluate our performance as compared to other companies in our industry that have different financing and capital structures and/or tax rates by using EBITDA. EBITDA allows for meaningful company-to-company performance comparisons by adjusting for factors such as interest expense, depreciation and amortization and taxes, which often vary from company to company. In addition, we utilize EBITDA in evaluating acquisition targets. Management also believes that EBITDA is a useful tool for measuring our ability to meet our future debt service, capital expenditures and working capital requirements, and EBITDA is commonly used by us and our investors to measure our ability to service indebtedness. EBITDA is not a substitute for the GAAP measures of earnings or of cash flow and is not necessarily a measure of our ability to fund our cash needs. In addition, it should be noted that companies calculate EBITDA differently and, therefore, EBITDA as presented in this Form 10-K may not be comparable to EBITDA reported by other companies. EBITDA has material limitations as a performance measure because it excludes (1) interest expense, which is a necessary element of our costs and ability to generate revenues because we have borrowed money to finance our operations, (2) depreciation, which is a necessary element of our costs and ability to generate revenues because we use capital assets and (3) income taxes,

which is a necessary element of our operations. We compensate for these limitations by relying primarily on our GAAP results and using EBITDA only supplementally. The following table reconciles EBITDA to net income and to net cash provided by operating activities.

Table of ContentsReconciliation of EBITDA to Net Income and  
to Net Cash Provided by Operating Activities

	Year Ended December 31,				
	2015	2014	2013	2012	2011
	(dollars in thousands)				
EBITDA	\$1,243,854	\$1,329,756	\$1,118,062	\$772,759	\$583,821
Less:					
Provision for income taxes	(298,396 )	(398,902 )	(331,747 )	(199,614 )	(142,466 )
Interest expense	(34,656 )	(37,352 )	(18,082 )	(43,049 )	(50,992 )
Depreciation and amortization	(245,757 )	(208,486 )	(157,808 )	(144,541 )	(131,397 )
Net income	665,045	685,016	610,425	385,555	258,966
Changes in operating assets and liabilities and other	371,794	273,083	34,453	244,683	76,898
(Income) loss from equity method investments	(632 )	(424 )	199	3,005	(427 )
Windfall tax benefits from share-based payment arrangements	(1,646 )	(6,704 )	(5,449 )	(11,967 )	(3,361 )
Deferred income taxes	39,784	58,967	93,732	(5,793 )	14,114
Write-off of debt issuance costs	—	—	—	1,277	—
Impairment of equity method investments	4,925	6,747	—	—	—
Impairment of long-lived assets	—	—	—	—	1,975
(Gains) losses from sales of securities	(3,798 )	(1,212 )	19	(16,429 )	—
Gain on acquisition, net of loss on the fair value remeasurement of preexisting equity interest	(21,045 )	—			