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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

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

For the fiscal year ended September 30, 2016,  
or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_  
Commission file number 1-32459

**HEADWATERS INCORPORATED**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other jurisdiction of  
incorporation or organization)  
**10701 South River Front Parkway, Suite 300**  
**South Jordan, Utah**  
(Address of principal executive offices)

**87-0547337**  
(I.R.S. Employer  
Identification No.)  
**84095**  
(Zip Code)

**(801) 984-9400**

(Registrant's telephone number, including area code)

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

**None**

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

**Common Stock, \$.001 par value**

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

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

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

Indicate by check mark whether the registrant has submitted electronically 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  No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company.

Large accelerated filer

Accelerated filer

Non-accelerated filer

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 common stock held by non-affiliates of the registrant as of March 31, 2016 was \$1,426,230,580, based upon the closing price on the New York Stock Exchange reported for such date. This calculation does not reflect a determination that persons whose shares are excluded from the computation are affiliates for any other purpose.

The number of shares outstanding of the registrant's common stock as of October 31, 2016 was 74,154,101.

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**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the registrant's definitive proxy statement to be issued in connection with registrant's annual meeting of stockholders to be held in 2017 are incorporated by reference into Part III of this Report on Form 10-K.

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## **Forward-looking Statements**

*This Annual Report on Form 10-K contains forward-looking statements relating to Headwaters' operations that are based on management's current expectations, estimates and projections about the industries in which Headwaters operates. Words such as "may," "should," "anticipates," "expects," "intends," "plans," "targets," "forecasts," "projects," "believes," "seeks," "schedules," "estimates," "budgets," "goals," "outlook" and similar expressions are intended to help identify such forward-looking statements. Forward-looking statements include Headwaters' expectations as to the managing and marketing of coal combustion products and other construction materials, the production and marketing of building products, the sales to oil refineries of residue hydrocracking catalysts, the development, commercialization, and financing of new products and other strategic business opportunities and acquisitions, and other information about Headwaters which are not purely historical by nature, including those statements regarding Headwaters' future business plans, the operation of facilities, the availability of feedstocks, and the marketability of coal combustion products, construction materials, building products and catalysts. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, many of which are beyond the Company's control and are difficult to predict. Therefore, actual outcomes and results may differ materially from what is expressed or forecasted in such forward-looking statements. The reader should not place undue reliance on these forward-looking statements, which speak only as of the date of this report. Unless legally required, Headwaters undertakes no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise. Among the important factors that could cause actual results to differ materially from those in the forward-looking statements are: changing feedstock and energy prices; actions of competitors or regulators; technological developments; potential disruption of the Company's production facilities, transportation networks and information technology systems due to war, terrorism, malicious attack, civil accidents, political events, civil unrest or severe weather; potential environmental liability or product liability under existing or future laws and litigation; potential liability resulting from other pending or future litigation; changed accounting rules under generally accepted accounting principles promulgated by rule-setting bodies; and the factors set forth under the heading "Risk Factors" in the Company's Annual Report on Form 10-K, quarterly reports on Form 10-Q and other periodic reports. In addition, such results could be affected by general domestic and international economic and political conditions and other unpredictable or unknown factors not discussed in this report which could have material adverse effects on forward-looking statements.*

Our internet address is [www.headwaters.com](http://www.headwaters.com). There we make available, free of charge, our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission (SEC). Our reports can be accessed through the investor relations section of our web site. The information found on our web site is not part of this or any report we file with or furnish to the SEC.

## PART I

### ITEM 1. BUSINESS

#### General Development of Business

Headwaters Incorporated (“Headwaters”®) is a building materials company operating in the building products and construction materials sectors. Our vision is to improve lives through innovative advancements in building products and materials. We sell building products such as manufactured architectural stone, siding accessory products, roof products, concrete blocks, and windows. We also sell construction materials such as coal combustion products (“CCPs”) and synthetic gypsum. CCPs include fly ash, which is primarily used as a partial replacement for portland cement in concrete.

We conduct our business through the following three reporting segments: building products, construction materials and energy technology. We have limited involvement in the energy sector where we sell catalytic materials to certain refineries engaged in heavy oil upgrading. We sold our other energy related businesses, including the business of reclaiming waste coal, which is presented as a discontinued operation.

Historically, and for all of 2016, the block product business has been a part of the building products segment. However, commencing in the December 2016 quarter, the construction materials segment will include the block product business. This change is being made because of the following changes, as well as others, in management and operations, all of which became operative effective as of October 1, 2016:

- The chief operating decision maker will make operating and resource allocation decisions considering the combined financial information for construction materials and the block group, which have similar economic characteristics;
- The block group management and accounting personnel will report to the construction materials segment’s management;
- Certain operational activities for the construction materials and block group will be closely coordinated to capture synergies and improve efficiencies. For example, the transportation groups are being brought together to promote backhauling, reduce repair and maintenance costs, and minimize down time. Construction materials management will provide oversight for certain other operational activities; and
- Fly ash storage is being initiated at block production sites to facilitate substitution of fly ash for portland cement used in manufacturing block products.

For purposes of this “*Business*” section of the Form 10-K, as well as in *Item 7: “Management’s Discussion and Analysis of Financial Condition and Results of Operations”* and *Item 8: “Financial Statements and Supplementary Data”* we have portrayed our block business as part of the building products segment. However, for *Item 1A: “Risk Factors”* which tend to be more forward-looking than historical, we have included the block business with the construction materials segment.

*Building Products.* This segment has established leading positions in several product categories in the building products sector, and is currently our largest reporting segment based on revenue.

We are a leading designer, manufacturer and marketer of siding accessories used in residential repair and remodeling and new residential construction applications. Our siding accessories include decorative window shutters, gable vents, mounting blocks, and window and door trim products. We also market functional shutters, specialty siding products and window wells. Our siding accessory sales are primarily driven by residential repair and remodeling and, to a lesser extent, by new residential construction.

We are a leading producer of manufactured architectural stone. Eldorado Stone®, our largest stone brand by revenue, is designed and manufactured to be one of the most realistic manufactured architectural stone products in the world. Our two additional brands are marketed at different price points for manufactured architectural stone, allowing us to compete across a broad spectrum of customer profiles. Our manufactured stone sales primarily are driven by new residential construction, but we also sell product for repair and remodel and commercial construction.

We have three product categories in specialty roofing. We manufacture and market resin-based roofing tiles. In December 2013, we acquired an 80% equity interest in the business of a leading Florida manufacturer of concrete roof tiles sold primarily in Florida and in April 2016, acquired a complimentary concrete roof tile business. In May 2014, we acquired the assets of a leading U.S. manufacturer of stone-coated metal roofing materials and in November 2015, we acquired the interests of another stone-coated metal roofing business.

We believe we are the largest manufacturer of concrete block in the Texas market, offering a variety of concrete-based masonry products through regional branding and distribution. A large portion of our concrete block sales is generated in the Texas institutional construction market, but we also serve the commercial and new residential construction markets.

In August 2016, we acquired the assets of the Krestmark™ windows business, which manufactures and sells primarily vinyl windows for new residential construction in the south central region of the U.S.

Our building products segment has a large customer base, including one-step and two-step wholesale distributors, retailers such as The Home Depot and lumber yards. We also sell certain products directly to contractors. As a result, sales are broadly diversified across the country geographically as well as by distribution channel. We believe we attract a large base of customers because we have a wide assortment of high quality products with strong brand recognition.

*Construction Materials.* We are a leader in the management and marketing of fly ash and synthetic gypsum. Construction materials is our second largest reporting segment based on revenue.

We procure fly ash from coal-fueled electric generating utilities and supply it to our customers as a partial replacement for portland cement in the production of concrete. CCPs, such as fly ash and bottom ash, are the non-carbon components of coal that remain after coal is burned.

Fly ash is most valuable when used as a mineral admixture to replace a portion of the portland cement used in concrete. Concrete made with fly ash has better performance characteristics than concrete made only from portland cement, including improved durability, decreased permeability and enhanced corrosion resistance. Further, concrete made with CCPs typically is easier to work with than concrete made only with portland cement, due in part to its better pumping and forming properties. Because fly ash can be substituted for a portion of the portland cement used in concrete and is generally less expensive per ton than portland cement, the total per cubic yard cost of concrete made with fly ash can be lower than the cost of concrete made exclusively with portland cement. According to a 2011 report sponsored by us from the American Road and Transportation Builders Association, the recycling of fly ash into concrete saves federal and state governments more than \$5 billion annually in infrastructure costs, based on the initial price savings of fly ash relative to portland cement and the longer durability of concrete made with fly ash.

In order to ensure a steady and reliable supply of CCPs, we enter into long-term, exclusive supply agreements with coal-fueled electric generating utilities. Our supply chain includes stand-alone CCP distribution terminals strategically located to provide customer access to CCPs, as well as direct customer service at plant sites. Our extensive distribution network allows us to transport CCPs significant distances to meet customer demand when supplies in local areas are unavailable.

A substantial majority of our CCP revenue comes from sales to an extensive customer base that uses fly ash for the partial replacement for portland cement in concrete. These customers are primarily ready mix concrete producers, but also include paving contractors and other manufacturers of concrete products. Our customers typically operate in limited geographical areas because of the high cost of transporting concrete and concrete products, but we sell fly ash in multiple regions across the country utilizing our broad sources of supply and our efficient distribution system.

In addition to our focus on long-term contracts with utilities and bolt-on acquisitions to increase supply of CCPs, we plan to grow our construction materials business by increasing the percentage of fly ash used as a mineral admixture for the partial replacement of portland cement and expanding the use of CCPs through customer recognition of the performance, economic and environmental benefits of CCPs. Based on Portland Cement Association and American Coal Ash Association data, we estimate that for calendar 2014, fly ash replaced approximately 17% of the portland cement that otherwise would have been used in concrete produced in the United States.

In March 2016, we acquired the interests of Synthetic Materials LLC, a U.S. leader in the synthetic gypsum processing and management industry. Like CCPs, synthetic gypsum is a by-product of electricity generation and most

often used as a replacement for mined gypsum in wallboard manufacturing, cement production and agricultural soil amendments.

*Energy Technology.* We are involved in heavy oil upgrading processes through the sale of our HCAT® catalyst material. The HCAT technology is a proprietary process that uses a liquid catalyst precursor to facilitate hydrogen transfer within the most difficult to upgrade, bottom-of-the-barrel feedstocks, enabling refiners to increase conversion or throughput with less fouling. Our HCAT technology is recognized in the industry as a commercially proven technology, based on operations for more than four years at our initial customer location.

We formerly owned and operated 11 coal cleaning facilities capable of separating ash from waste coal to provide a refined coal product that is higher in Btu value and lower in impurities than the feedstock coal and which can generate refined coal tax credits under Internal Revenue Code Section 45. In September 2011 we committed to a plan to sell all of our coal cleaning facilities. During 2012 we sold one facility, and in 2013, we sold the remaining ten facilities.

Headwaters was incorporated in Delaware in 1995. Our stock trades under the New York Stock Exchange symbol “HW.”

As used herein, “Headwaters,” “combined company,” “we,” “our” and “us” refer to Headwaters Incorporated and its consolidated subsidiaries, including Tapco International Corporation and its subsidiary, Entegra Holdings, LLC and its subsidiaries, Gerard Roof Products, LLC and its subsidiaries, Headwaters Building Products, Inc. and its subsidiaries, Eldorado Stone LLC and its subsidiaries and affiliates, and Headwaters Windows, LLC (operating in our building products segment); Headwaters CM Holdings, LLC and its subsidiaries, including Headwaters Construction Materials, LLC, Headwaters Plant Services, LLC, Headwaters Resources, LLC, and Synthetic Materials, LLC (operating in our construction materials segment); Headwaters Heavy Oil, LLC and Headwaters Technology Innovation Group, Inc. (“HTI,” operating in our energy technology segment); and Headwaters Energy Services Corp. and its subsidiaries (formerly operating in our energy technology segment); unless the context otherwise requires. As used in this report: Headwaters Building Products or “HBP” refers to Tapco International Corporation and its subsidiary, Entegra Holdings, LLC and its subsidiaries, Gerard Roof Products, LLC and its subsidiaries, Headwaters Building Products, Inc. and its subsidiaries, Eldorado Stone LLC and its subsidiaries and affiliates, and Headwaters Windows, LLC. “HCM” refers to Headwaters CM Holdings, LLC and its subsidiaries, including Headwaters Construction Materials, LLC, Headwaters Resources, LLC and its subsidiaries (“HRI”), and Headwaters Plant Services, LLC (“HPS”). “HTI” refers to Headwaters Heavy Oil, LLC and Headwaters Technology Innovation Group, Inc. “HES” refers to Headwaters Energy Services Corp., together with its consolidated subsidiaries and affiliates; unless the context otherwise requires.

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## Building Products

### *Principal Products and their Markets*



We have leading product groups in siding accessories, manufactured architectural stone, concrete block, specialty roofing, and windows. We manufacture and distribute nationally siding accessories (such as window shutters, gable vents, mounting blocks, trim, moulding, and simulated wood shake siding) and professional tools used in exterior residential remodeling and new residential construction. Our manufactured architectural stone has a national presence in commercial, residential and remodeling. We manufacture and sell concrete roof tiles in Florida and distribute nationally resin-based composite roof shingles and stone-coated metal roofing products. We also are a leading supplier of concrete blocks and specialty blocks and vinyl windows for new residential construction in Texas. We believe our traditional building products and new product offerings position us for significant growth as residential remodeling and new residential construction activity continue to improve.

*Exterior Siding and Siding Accessories.* We are a leading designer, manufacturer and marketer of resin-based siding accessories and professional tools used in exterior residential home improvement and construction under multiple brands. These products, which are either injection-molded or extruded, enhance the appearance of homes and include decorative window shutters, gable vents, and mounting blocks for exterior fixtures, roof ventilation, trim board and moulding products, specialty siding products and window well systems. Professional tools include portable cutting and shaping tools used by contractors, on-site, to fabricate customized aluminum shapes that complement the installation of exterior siding.

We market nationally our injection-molded building product accessories primarily to one-step distributors, and also market to big-box stores and manufactured housing. In addition, we market tools, functional shutters, specialty siding products, window wells, and cellular PVC trim board and moulding.

These building products principally serve applicator needs for siding and siding accessories. Our injection-molded products are designed to enhance the exterior appearance of the home while delivering durability at a lower cost compared to similar aluminum, wood and slate products.

*Manufactured Architectural Stone.* Under the Eldorado Stone®, Dutch Quality Stone® and StoneCraft™ brands, we offer a wide variety of high-quality manufactured architectural stone products to meet a variety of design needs and price points. Our manufactured architectural stone siding incorporates several key features, including high aesthetic quality, ease of installation, durability, low maintenance, attractive cost relative to other siding materials and

widespread availability. Our largest brand by revenue, the Eldorado Stone brand is designed and manufactured to be one of the most realistic manufactured architectural stone products available.

Our manufactured architectural stone siding is a lightweight, adhered siding product recommended or used by national, regional and local architectural firms, real estate developers, contractors, builders and homeowners. Our stone products are used in construction projects ranging from large-scale residential housing developments and commercial projects to do-it-yourself home improvement jobs. In addition, our manufactured stone product lines are used in a variety of external and internal home applications such as walls, archways, fireplaces, patio kitchens, and landscaping. We continually introduce new products in order to improve our offering, such as outdoor fire bowls, and fireplace surrounds.

We believe that our focus on product quality, breadth and innovation, combined with a geographically diversified manufacturing platform, provides us with significant marketing advantages over traditional materials such as natural stone, brick or stucco. Our stone group has implemented a home builder marketing effort, enabling national home builders to have ready access to bundled packages of the full line of Headwaters stone division products, including stone and brick veneer from Eldorado Stone®, Dutch Quality Stone® and StoneCraft™, as well as Eldorado fireplace surrounds, Eldorado outdoor signature kitchens and artisan fire bowls.

*Specialty Roofing Products.* We have three product categories in specialty roofing, including resin-based composite, concrete, and stone-coated metal roofing products. We manufacture and market resin-based roofing tiles and in December 2015 we acquired the assets of another resin-based composite roofing business. We market resin-based composite roof tiles in North America through the InSpire®, Aledora® and Enviroshake® brands.

In December 2013, we acquired an 80% equity interest in the business of a leading Florida manufacturer of high quality concrete roof tiles and accessories sold under the Entegra® brand primarily in Florida. In April 2016, Entegra acquired the interests of another concrete roof tile business. Many Entegra one-step distribution customers are already customers of other Headwaters products. Entegra provides us with additional sales and distribution opportunities for building products in a large and growing state in the U.S. We believe that the centralized location of Entegra's manufacturing plant in Florida, the quality of its contractor and customer relationships, and the scope of its products and services provide a strong competitive advantage.

In May 2014, we acquired the assets of a leading U.S. manufacturer of stone-coated metal roofing materials and in November 2015 we acquired the interests of another stone-coated metal roofing business. We market stone-coated metal roofing in the United States under the Gerard®, Allmet® and Metrotile® brands. With the durability of metal but the appearance of more traditional shingles or tiles, the stone-coated metal roofing product complements our resin-based composite and concrete-based specialty roofing products, broadening our products as well as our geographic footprint in the specialty roofing category. Our roofing product sales are heavily dependent on residential repairs, often necessitated by certain extreme weather events, such as strong winds or hail, and to a lesser extent on new residential construction.

*Windows.* In August 2016, we acquired the assets of the Krestmark™ window business based in Texas. We believe we are one of the leading suppliers of vinyl windows to builders of new homes in the Dallas, Texas area, one of the fastest growing residential real estate regions in the U.S. In addition to vinyl windows for replacement and new construction, we manufacture aluminum windows and patio doors which are sold throughout the south central U.S.

*Concrete Block.* We believe we are the largest manufacturer and seller of concrete block in the Texas market, which is one of the largest markets for block products in the U.S. We offer a variety of concrete-based masonry products including standard grey block, split faced block, ground face block, polished block and textured block. Our product offerings allow us to meet a range of architectural specifications for concrete block and other products. We employ a regional branding and distribution strategy. A large portion of our concrete block sales are generated from institutional construction markets in Texas, including school construction. In September 2015, we purchased the assets of a central Texas-based distributor of block and other masonry products to increase our sales and distribution in that area.

#### *Manufacturing*

We conduct manufacturing, distribution and sales operations for resin-based siding accessories and ancillary products at four facilities. Manufacturing assets include injection molding presses, many of which are automated through robotics or conveyor systems which have reduced cycle times and have helped to reduce waste. Nonconforming output is reused as raw material, further minimizing waste.



Our manufactured architectural stone brands are currently manufactured through a network of five plants and two distribution facilities. We continually focus on safety, quality and service, while also focusing on reducing the cost of our manufactured architectural stone.

Our three specialty roofing products are produced in five manufacturing facilities. While resin and stone coated metal roofing products are manufactured from three locations for national distribution, concrete tile is manufactured locally for Florida.

We manufacture our window products at three facilities, all located in the Dallas, Texas area. We purchase glass panels and vinyl and aluminum trim or lineals from third parties and cut to size and assemble at our plants. We are focused on building affordable, quality window products with on-time shipments.

We operate six modern concrete block manufacturing facilities. Our block operations are located to provide coverage of all the key metropolitan areas in Texas and Baton Rouge, Louisiana, and to lower transportation costs and gain efficiencies by concentrating the manufacturing of specific products in fewer facilities.

### *Sales and Marketing*

Our resin-based siding products' sales and marketing organization supports one-step and two-step distribution and retail channels through an extensive sales network that includes independent sales representatives and a group of business development managers, regional sales managers and sales executives.

Our manufactured architectural stone products sales force works directly with one-step and two-step masonry distributors as well as architects and contractors to provide information concerning the aesthetic, physical and installation attributes of our manufactured stone product. Manufactured architectural stone products are marketed through a direct sales force and a network of independent sales representatives through one-step and two-step distribution.

Our block sales personnel work directly with contractors and participate in the bidding process for large institutional and commercial projects. Often, the sales process starts with architects having our products specified on construction projects.

Roofing products are primarily sold through one-step distributors, although we also supplement sales directly to roofing contractors in certain circumstances. In addition to our five manufacturing sites, we have multiple distribution centers to facilitate customer service.

Our windows sales are primarily direct to home builders and contractors in Texas, Oklahoma, Arkansas, Louisiana, Alabama, New Mexico, Kansas, Mississippi, and the Florida Panhandle. We strive to develop customer loyalty with timely, complete order delivery and strong customer service.

We maintain relationships with local contractors, professional builders, and other end-users by participating each year in many local and national shows. Local shows, sponsored by local distributors, enable us to promote our products through hands-on comparisons to competing products. These shows enable us to receive useful feedback from local contractors, which may lead to new product ideas as well as significant goodwill within the trade.

### *Distribution*

Resin-based siding accessories and our ancillary products are distributed throughout the United States and Canada through five primary distribution channels: one-step distributors that sell directly to contractors, two-step distributors that sell our products to lumber yards and one-step distributors, retail home centers/mass merchandisers, direct sales to lumber yards, and manufactured housing.

Manufactured architectural stone is distributed throughout North America, Europe and Asia primarily on a wholesale basis through a network of one-step and two-step masonry distributors, including masonry and stone suppliers, roofing and siding materials distributors, fireplace suppliers and other contractor specialty stores. We also distribute some brands through national retail home centers.

Resin-based roofing products are distributed in North America and Europe, primarily through one-step distribution. Stone-coated metal roofing is distributed in North America, Europe, Asia and Africa through one-step distribution, specialty roofing supply yards, and direct sales to roofing and home improvement contractors. Concrete roof tiles are distributed in Florida through one-step distribution, specialty roofing supply yards and direct sales to roofing contractors.

Window products are distributed directly from our manufacturing plants throughout the south central United States through one-step distribution, and directly to lumber yards and home builders.

We distribute our concrete block products directly to masonry and general contractors as well as through national and regional retail home centers.

#### *Major Customers*

We have a large customer base for our building products in residential home improvement and new home construction that include many retail customers, wholesalers, lumber yards and contractors across North America and to a lesser extent, in Europe and Asia. Sales are diversified across customers and ship-to locations, mitigating the impact of regional economic circumstances.

#### *Sources of Available Raw Materials*

The primary raw materials purchased for resin-based siding and roofing products are polypropylene, polyethylene and PVC, which are available for purchase from multiple suppliers. We also use comparatively small amounts of styrene. From time to time, prices for some of the raw materials used in production and assembly processes fluctuate significantly. Although we do not have any long-term contracts with suppliers and we purchase supplies on a purchase order basis, we occasionally make volume purchases of materials at fixed prices.

We purchase cement, sand and aggregates as primary raw materials for our concrete-based products. We do not have long-term contracts for the supply of these materials and demand for these materials can be volatile while supplies are constrained to local sources because of transportation costs. Our costs to purchase raw materials have risen in some regions for certain materials. However, we have not suffered from any long-term shortages and believe that supplies will be adequate in the future.

The primary feedstocks for our stone-coated metal roofing products are rolled steel, stone chips and coatings. We do not purchase these materials under long term supply contracts, but benefit from long term supplier relationships. We have not suffered any shortages and believe that feedstock supplies will be adequate in the future. Our raw stone-coated metal roofing feedstock costs have risen gradually in recent years.

Our window products are made primarily from glass, vinyl and aluminum. We purchase from multiple long term suppliers, although we generally do not have long term window materials supply contracts.

#### *Competition*

We are a sales leader in our legacy siding accessory products because of our strong ability to manufacture and distribute a broad range of products economically and rapidly. We believe that we have increased sales faster than sector growth in some of our newer accessory products like trimboard. We have developed a recognized name in the manufactured architectural stone industry because of service, excellent authenticity and broad selection. Our architectural stone products use a multi-channel distribution network, but we face strong competition from other stone producers in the one-step channel and with products sold directly to contractors. Our specialty roofing products primarily compete against high-end roofing alternatives such as upper end asphalt, concrete, metal and other niche roofing products. Although our block business is not national in breadth, it enjoys a strong regional position in Texas and Louisiana, but faces competition from other Texas and Louisiana block manufacturers.

Our primary competition for resin-based siding products includes Ply Gem, Royal, and Alpha in siding accessories, Azek in trimboard, and CertainTeed in specialty siding. Notwithstanding our national position as a leading producer of manufactured architectural stone, we face significant competition from many other national, regional and local producers of similar products. Our specialty roofing products also compete against national and regional manufacturers of similar products, such as Davinci, Decra, Owens Corning, GAF, and Eagle, as well as other types of roofing materials. Our windows business also competes against numerous national and regional producers of window products. Many of our competitors have significant financial and other resources and may be able to take advantage of acquisitions and other opportunities more readily than we can.

#### **Construction Materials**

We are the nation's largest manager and marketer of CCPs, including fly ash, a mineral admixture that may be used as a partial replacement for portland cement in concrete, and synthetic gypsum, another byproduct of coal-fueled electric generating facilities. In order to ensure our supply of CCPs, we have formed numerous long-term exclusive

supply and service agreements with coal-fueled electric generating utilities throughout the United States and maintain stand-alone CCP distribution terminals across North America, as well as plant-site supply facilities. With our extensive distribution network, we can transport CCPs significant distances to states that have limited coal-fueled electric utilities producing CCPs, yet historically have been high volume CCP consumers.

#### *Principal Products and their Markets*

CCPs consist of several major classifications of inorganic residuals collected after coal is consumed in coal-fired power plants. Whereas a significant amount of CCPs are disposed by utilities without being used beneficially, when properly managed, CCPs can be valuable products. We sell high value fly ash for the partial replacement for portland cement in a wide variety of concrete applications, including infrastructure, commercial, and residential construction. We deliver fly ash to ready mix customers in most regions of the United States. We have a number of long-term, exclusive management contracts with coal-fueled utilities throughout the United States and provide CCP management services at plant-site locations.

Utilities produce CCPs year-round. In comparison, sales of CCPs are impacted by seasonality, following construction demands, peaking in the summer months and declining in the winter. If CCPs are not used in the winter months, they must be disposed of or stored.

CCPs are produced at power plant sites and must be transported to the point of consumption, including thousands of ready mix locations across the country. Due to transportation costs, CCP consumption is generally regional. Product transportation to areas that have few coal-fueled electric utilities producing high quality CCPs adds significantly to the cost, but creates a competitive advantage for us due to our robust distribution system.

We benefit from contractual supplies and our broad distribution system. We maintain stand-alone CCP distribution terminals across North America, as well as plant-site supply facilities. In addition, we have area managers and technical sales representatives nationwide to provide customer support.

We provide services as an integrated component of our work with coal-fueled utilities and their production of CCPs. We focus on providing industrial services to utilities that include constructing and managing landfill operations, operating and maintaining material handling systems and equipment maintenance. These are services that enhance our reputation in the marketing of fly ash and strategically position us as an integrated manager of CCPs. We have more than three decades of experience designing, permitting, constructing, operating and closing solid waste disposal operations for utilities and other industrial clients. We currently provide such services to some of the largest utilities in the United States.

The complexity of CCP disposal operations is expected to increase as new environmental regulations are adopted. Many utilities may be forced to upgrade disposal practices or convert to new types of disposal. As new disposal regulations are adopted, we plan to use our experience with landfill operations, pond cleanouts, converting disposal operations from wet to dry handling, designing and managing systems for handling flue gas desulphurization materials, and deploying systems for improving fly ash quality to expand our business. By providing such services to utilities, we expect to improve our position as the leading manager and marketer of fly ash in the United States.

The benefits of CCP use in construction applications include improved product performance, cost savings and positive environmental effects. Fly ash improves the performance of concrete, decreasing permeability and enhancing durability while providing environmental benefits. Fly ash utilization conserves landfill space and energy, and reduces greenhouse gas emissions. According to the U.S. Environmental Protection Agency (“EPA”), one ton of fly ash used as a mineral admixture in the partial replacement of portland cement eliminates approximately one ton of carbon dioxide emissions associated with cement production. The value of utilizing fly ash in concrete has been recognized by a number of federal agencies, including the U.S. Department of Energy, the U.S. Department of Transportation, and the EPA. Today almost all states specify or recommend the use of fly ash in state and federal transportation projects. See “Business—Regulation” and “Risk Factors” for a description of regulatory actions that may affect the supply, management, and disposition of CCPs.

Higher-quality fly ash and other high-caliber CCPs possess greater value than low quality CCPs because of their diverse, higher-margin commercial uses. The quality of fly ash produced by the combustion process at coal-fueled facilities varies widely and is affected by the type of coal feedstock used and the boiler operations of the utilities. We assist our utility clients in their efforts to improve the production of high-value CCPs at their facilities. Our quality control system ensures customers receive their specified quality of CCPs while our relationships with utilities, transportation equipment and terminal facilities provide stable and reliable supply. We use our proprietary technology to address one of the more prominent reasons for poor ash quality, i.e., high levels of native or activated carbon in the ash. In many cases, higher carbon ash treated with our additive results in ash that meets specifications for the replacement of portland cement.

Synthetic gypsum is another product of coal-fueled electric generation plants. In March 2016, we acquired a leading business that develops and manages flue gas desulfurization (“FGD”) sources of synthetic gypsum, including dewatering processes, in order to market FGD products. Synthetic gypsum is most often used as a replacement for mined gypsum in wallboard manufacturing, cement production and agriculture soil amendments. Our synthetic gypsum business operates at multiple utility sites in the eastern United States.

### *Sales and Marketing*

*Expansion of Market Awareness of CCPs’ Benefits.* Customer demands for quality and reliability drive our CCP marketing and sales program. Our marketing efforts emphasize availability, performance and environmental benefits of CCP usage. We participate in a variety of marketing activities to increase fly ash sales, including professional outreach, technical publications, relationships with industry organizations, and involvement in legislative and regulatory initiatives planned to lead to greater use of CCPs.

*New Technologies for CCP Utilization.* Our research and development activities focus on expanding the use of CCPs and decreasing landfill disposal. For example, although generally unsuitable for use in traditional concrete applications, we developed and offer for sale two products that utilize the type of fly ash generated at fluidized bed combustion (“FBC”) power plants. Stabil-Mix®, a mixture of fly ash and lime used for roadbed stabilization, may be custom blended for optimum results in varying soil conditions. Pozzalime takes advantage of the lower SO<sub>3</sub> and free lime content of some sources of FBC ash to create a product suited for use as a partial cement replacement in the manufacture of concrete masonry units.

*Technologies to Improve Fly Ash Quality.* We developed technologies that maintain and improve the quality of CCPs, further enhancing their marketability. Today, many utilities are switching fuel sources, changing boiler operations and introducing activated carbon and ammonia into the exhaust gas stream in an effort to meet increasingly stringent emissions control regulations. While these factors may negatively affect fly ash quality, we are addressing these challenges with the development and commercialization of two technologies. RestoreAir® treats unburned carbon and activated carbon in fly ash to minimize carbon’s adverse effects on concrete’s freeze-thaw characteristics. We also have technology that, in many instances, mitigates the impact of ammonia contaminants in fly ash.

### *Major Customers*

Most of our construction materials customers purchase CCPs for beneficial use. A substantial majority of our CCP revenue comes from sales to customers who use fly ash as a mineral admixture for the partial replacement of portland cement in concrete. These customers are primarily ready mix concrete producers, but also include paving contractors and manufacturers of concrete products. CCPs are also used by some customers for soil stabilization, road base and other applications. Although our customers typically operate in limited regions because of the high cost of transporting concrete and concrete products, we sell CCPs in most regions of the country by utilizing our extensive distribution system. No customer represents more than 10% of our construction materials segment revenue.

### *Sources of Available Raw Materials*

Coal is the largest indigenous fossil fuel resource in the United States. The U.S. Energy Information Administration estimates that in 2015 coal was used to produce approximately 33% of the electricity generated in the United States. The combustion of coal results in a high percentage of residual materials which serve as the “raw material” for the CCP industry. According to the American Coal Ash Association, in 2015 about 61 million tons of the approximately 117 million tons of U.S. CCPs generated were efficiently utilized. As long as a significant amount of electricity is created using coal-fueled generation, we believe there will be significant supplies of CCP raw materials. However, as the Clean Air Act, the Resource Conservation and Recovery Act (“RCRA”) and other environmental rules

are implemented, the efforts of coal-fueled electric power producers to comply with tighter regulatory requirements may have a serious adverse effect on the supply of CCPs. Increasingly strict requirements make coal burning less attractive for utilities. Faced with the prospect of more stringent regulations, litigation by environmental groups and a decrease in the cost of natural gas, some electric utilities are reducing their portfolio of coal powered energy facilities. In recent years, multiple companies have announced plans to close coal-fired power plant units, or dropped plans to open new plants. While the current level of reduced use of coal in power generation has not materially impacted our fly ash supply, significant diminished use of coal in the future could reduce our supply of CCP raw materials. (See “Business—Regulation” and “Risk Factors.”)

#### *Competition*

Marketing CCPs, and particularly fly ash, competes vigorously with portland cement in the production of concrete. Based on Portland Cement Association and American Coal Ash Association data, we estimate that for calendar 2014, fly ash replaced approximately 17% of the portland cement that otherwise would have been used in concrete produced in the United States. There is also competition among fly ash suppliers. Our nationwide CCP distribution system, not enjoyed by our competition, allows us to effectively compete for long-term exclusive supply contracts with utilities. Our CCP business has a presence in every region in the United States but, because the costs of transportation are high, most of the competition is regional. There are many local, regional and national companies that compete for sales with portland cement or similar CCP products and with numerous other substitute products. Although we have a number of long-term CCP management contracts with our clients, some of these contracts allow for the termination of the contract at the convenience of the utility company upon a specified notice. Our major competitors include Lafarge North America Inc., Eagle Materials, Boral Material Technologies Inc. and Cemex. Many of our competitors have greater financial, management and other resources and may be able to take advantage of potential acquisitions and other opportunities more readily than we can.

### **Energy Technology**

#### *Business Opportunities*

*Heavy Oil Upgrading Technology.* In our energy technology segment, we are focused on increasing the value of low value oil through a technology that improves conversion of petroleum refinery vacuum residuals into higher-value products, and we continue to develop for commercialization our heavy oil upgrading business and technology. We own patents and know-how related to the HCAT® technology. Our HCAT technology is a unique heavy oil upgrading process for the addition of hydrogen to heavy residual oils such as petroleum vacuum residue (so-called “bottom of the barrel”) and tar sand bitumen which may result in lighter, more valuable petroleum materials. The proprietary HCAT process uses a highly active, molecular-scale catalyst to more efficiently convert heavy oils, including the asphaltenic components, into more valuable products, such as diesel fuel. We now supply our catalyst precursor to the heavy oil upgrading units at three refineries. We will continue to develop the long sale cycle opportunities for the HCAT technology with additional refineries through the efforts of our own small group of sales executives and through marketing cooperation with established industry participants.

#### *Discontinued Coal Cleaning Operations*

In September 2011, we decided to focus on our core building products and construction materials businesses and therefore committed to a plan to sell our coal cleaning business comprised primarily of 11 coal cleaning facilities and associated assets. In a series of transactions in 2012 and 2013, we sold our coal cleaning business. The financial results of our former coal cleaning business are presented in our statements of income as a discontinued operation.

#### *Competition*

Our heavy oil upgrading business experiences competition from many of the world’s major petroleum, chemical and energy companies. Those companies are actively engaged in research and development activities that could result in a competitive slurry catalyst system. For example, Chevron has begun marketing a catalyst system that could be competitive with the HCAT® technology. Many of our competitors have greater financial and other resources and may be able to take advantage of acquisitions and other opportunities more readily.

## Segments and Major Customers

We operate in three business segments: building products, construction materials and energy technology. Additional information about segments is presented in Note 3 to the consolidated financial statements included herein. No customer accounted for more than 10% of total revenue from 2014 through 2016.

## Seasonality

Our building products and construction materials segments experience seasonal changes in revenue. Construction of new homes, repair and remodeling, and commercial and infrastructure projects slow during winter conditions and increase during temperate seasons. Because our products are used in construction projects, our revenues increase in the spring, are strong in the summer and fall, and drop significantly in the winter months, typically making our second fiscal quarter our lowest revenue quarter.

## Intellectual Property

As of September 30, 2016, we had approximately 230 U.S. and foreign counterpart patents and approximately 65 U.S. and foreign counterpart patents pending. Additionally, we have approximately 430 U.S. and foreign trademarks and approximately 69 U.S. and foreign trademark applications pending. The following table lists the number of patents and trademarks, U.S. and foreign, by segment:

	Patents		Trademarks	
	Issued	Pending	Issued	Pending
Building Products	89	13	380	39
Construction Materials	13	4	21	10
Energy Technology and Corporate	128	48	29	20

Collectively, the intellectual property is important to us, but except in energy technology, there is no single patent or trademark that is itself material to us at the present time. In our energy segment, we have patents protecting our heavy oil upgrading technology that are material to that business.

There can be no assurance as to the scope of protection afforded by the patents. In addition, there are other technologies in use and others may subsequently be developed, which do not, or will not, utilize processes covered by the patents. There can be no assurance that our patents will not be infringed or challenged by other parties or that we will not infringe on patents held by other parties. Because some of these patents represent new technology, the importance of the patents to our business will depend on our ability to commercialize these technologies successfully, as well as our ability to protect our technology from infringement or challenge by other parties. Patents may expire before they are a commercial success.

In addition to patent protection, we also rely on trade secrets, know-how and confidentiality agreements to protect technologies. Despite these safeguards, such methods may not afford complete protection and there can be no assurance that others will not either independently develop such know-how or obtain access to our know-how, concepts, ideas, and documentation. Since our proprietary information is important to our business, failure to protect ownership of our proprietary information would likely have a material adverse effect on us.

## Regulation

*Environmental.* Our operations and those of our suppliers and customers involved in coal-based energy generation, primarily utilities, are subject to federal, state and local environmental regulations. Our coal-based operations and those of our customers, including our sold coal cleaning operations, are subject to regulations that impose limits on the discharge of air and water pollutants and establish standards for the treatment, storage and disposal of solid and hazardous waste materials and the reclamation of land. Compliance with the applicable regulations adds to the cost of doing business and may expose us to potential fines for non-compliance or may require us to spend money to investigate or remediate contaminated facilities or reclaim disturbed land. Moreover, in order to establish and operate power plants, our operations to collect and transport CCPs and our former coal cleaning facilities, we and our customers have obtained various federal, state and local permits and must comply with processes and procedures that have been approved by regulatory authorities. Compliance with permits, regulations and approved processes and procedures helps protect the environment and is critical to our business. Any failure to comply could result in the issuance of substantial fines and penalties and may cause us to incur environmental or reclamation liabilities or subject us to third party claims.

We believe that all required permits to construct and operate facilities have been or will be obtained and believe all of our current facilities are in substantial compliance with, and our former facilities during our period of ownership or operations were in substantial compliance with, all applicable environmental laws and regulations governing our operations.

In spite of safeguards, our operations entail risks of regulatory noncompliance or accidental discharge that could create an environmental liability, because regulated materials are used or stored during normal business operations, including in our CCP and former coal cleaning operations. Moreover, we use regulated chemicals in operations involving distillation to purify products, analysis, packaging of chemicals and the selling, warehousing and manufacturing of organic chemicals in small research volumes. We also use facilities to perform research and development activities involving coal, oil, chemicals and industrial gases, such as hydrogen. As a result, petroleum and other hazardous materials have been and are present in and on our properties. We generally hire independent contractors to transport and dispose of any wastes generated during such activities and send the wastes to approved facilities for disposal.

Our construction materials business is dependent upon managing CCPs acquired from our suppliers, typically coal-burning power plants. Coal-burning power plants and the coal industry are generally highly regulated under federal and state law. Environmental regulation affecting this industry is ever-evolving, including the following:

- The federal Clean Air Act of 1970 and subsequent amendments, particularly the Clean Air Act Amendments of 1990. Regulation by the EPA and corresponding state laws and regulations, limit the emission of air pollutants such as SO<sub>x</sub>, NO<sub>x</sub> and particulate matter (“PM”). The EPA finalized more stringent ambient air quality standards for fine PM in January 2013 and for ozone in October 2015. Following litigation by environmental groups seeking to hold the EPA to the statutorily required timeline for reviewing ambient air quality standards for NO<sub>x</sub> and SO<sub>x</sub>, in September 2016, the EPA initiated the review of the NO<sub>x</sub> standards by issuing a draft policy assessment, but the timeline for when those standards will be finalized remains unknown. The EPA has taken no additional steps in revisiting the SO<sub>x</sub> standards. To meet emissions limits, utilities have been required to make changes such as changing fuel sources, installing expensive pollution control equipment and, in some cases, shutting down plants.
- In July 2011, the EPA adopted the Cross-State Air Pollution Rule (“CSAPR”), a cap-and-trade type program requiring utilities to make substantial reductions in SO<sub>x</sub> and NO<sub>x</sub> and emissions that contribute to ozone and in fine PM emissions in order to reduce interstate transport of such pollution. CSAPR was challenged and vacated by the D.C. Circuit in August 2012, but that decision was reversed by the Supreme Court in April 2014. The D.C. Circuit has since lifted its stay on CSAPR and ruled in favor of the EPA on the remaining significant issues. In January 2016, the EPA filed a brief with the D.C. Circuit addressing the remaining legal challenges left undecided by the Supreme Court’s 2014 decision. Conforming with a court-ordered schedule, the EPA implemented the first phase of CSAPR in 2015 and 2016 and will implement the second phase in 2017. In November 2014, the EPA issued a notice of data availability (“NODA”) outlining emission allowance allocations for existing generating units that began operating before 2010. In January 2015, the EPA issued a second NODA detailing emission allowance allocations for existing generating units that began operating after 2010. In September 2016, the EPA finalized a rule updating CSAPR in order to maintain 2008 ozone emission limitations in downwind states by addressing summertime (May-September) transport of ozone pollution. The update, which commences in May 2017, sets stricter NO<sub>x</sub> season emission budgets in 22 states and could affect up to 886 coal-fired facilities. These emission control requirements can impact the quantity and quality of CCPs produced at a power plant, can add to the costs of operating a power plant and could make coal a less attractive fuel alternative in the planning and building of utility power plants.
- Certain environmental laws, including the Comprehensive Environmental Response, Compensation and Liability Act (“CERCLA”) and similar state laws, impose strict, joint and several liability on responsible parties for investigation and remediation of regulated materials at contaminated sites. CCPs may contain materials such as metals that are regulated materials under these laws. Land application of CCPs as a beneficial use is regulated by a variety of federal and state statutes, which impose testing and management requirements to ensure environmental protection. However, mismanagement of CCPs can give rise to liability under CERCLA and similar laws.
- Under its Mercury and Air Toxics Standards for Power Plants rule, in February 2012 the EPA promulgated final limits on mercury and other toxic chemicals from new and modified power plants. In June 2015, the

Supreme Court ordered the EPA to undertake cost-benefit analysis when promulgating mercury and air toxics standards. In April 2016, the EPA published a supplemental finding pursuant to the Supreme Court's directive, which is currently being challenged at the D.C. Circuit. If upheld, requirements to control mercury emissions could result in implementation of additional technologies at power plants that could negatively affect fly ash quality.

- Some states have adopted legislation and regulatory programs to reduce greenhouse gas ("GHG") emissions, either directly or through mechanisms such as renewable portfolio standards for electric utilities. These programs require electric utilities to increase their use of renewable energy such as solar and wind power. Federal GHG legislation appears unlikely in the near term. However, in the absence of federal GHG legislation, the EPA has taken several recent steps to regulate GHG emissions using existing Clean Air Act authorities, including setting GHG emission thresholds for determining when new and existing power plants must obtain certain construction or operating permits. The Supreme Court ruled on a challenge to the EPA's actions in June 2014, upholding the EPA's ability to regulate GHG emissions from sources already required to have these permits for conventional pollutants but finding that GHGs alone could not trigger the challenged permitting requirements. In August 2015, the EPA finalized New Source Performance Standards for GHG emissions from new and existing fossil-fuel fired electric power plants that anticipate partial use of carbon capture and storage technology. Also in August 2015, the EPA finalized a rule for existing sources, known as the Clean Power Plan, which establishes state-specific, rate-based reduction goals for carbon emissions from the power sector. The Clean Power Plan calls on the power sector to reduce carbon emissions to 32% below 2005 levels by 2030, with the first incremental decreases beginning in 2022. After affected states and industry groups challenged the new regulations, in February 2016 the Supreme Court stayed implementation of the Clean Power Plan pending judicial review at the D.C. Circuit. In September 2016, the D.C. Circuit heard oral arguments en banc to determine whether the EPA had authority under the Clean Air Act to regulate carbon emissions under the existing hazardous pollutant program. A decision is expected in early to mid-2017, but litigation on the merits could continue to the Supreme Court. If the Clean Power Plan is upheld, various states' utility companies would be encouraged to substitute generation from low-emitting coal plants and zero-emitting renewable sources for generation from higher-emitting coal plants. Such changes in the energy market could impact the quantity of CCPs produced by HCM's suppliers, add to the cost of operating power plants and make coal powered plants a less attractive option in the planning and commissioning of new energy generating facilities.
- The EPA is addressing water quality impacts from coal-burning power plants and coal mining operations. In September 2015, the EPA finalized new effluent limitations for steam electric power generating facilities. The final rule requires operators of coal plants with a generating capacity over 50 megawatts to store fly ash and bottom ash in dry landfills, rather than containment ponds. Approximately 12% of coal plants will be affected, and some marginal operations may shut down rather than face the expense of complying with the new effluent discharge requirements. Multiple challenges to the effluent limitation guidelines have been consolidated and are pending before the Court of Appeals for the Fifth Circuit. In addition, the EPA finalized new regulations to minimize adverse environmental impacts to aquatic life from cooling water intake structures at existing electric generating plants, which are being challenged by environmental and industry groups at the Fifth and Second Circuit Courts of Appeals. More stringent regulation of coal-burning power plants and coal mining operations could increase the cost for utilities and thus indirectly impact the availability and cost of fly ash for HCM's CCP activities.

Although our business managing CCPs for utility customers may benefit from opportunities to manage compliance with certain of the new regulatory requirements, increasingly strict requirements such as those described above generally will increase the cost of doing business and may make coal burning less attractive for utilities. Faced with more stringent regulations, litigation by environmental groups, and a decrease in the cost of natural gas, some electric utilities are reducing their portfolio of coal powered energy facilities. For example, in recent years, multiple companies announced plans to close coal-fired power plant units, or dropped plans to open new plants, citing the cost of compliance with pending or new environmental regulations. The potential negative impact on job prospects in the utility and mining industries has prompted considerable concern in Congress, leading to calls to restrict the EPA's regulatory authority. The outcome of these developments cannot be predicted. To date, our business has not had a significant impact from plant closures because our national footprint allows us to move fly ash to satisfy demand; however, if the rate of coal-powered plant closures increases, we may be adversely affected in the future. Nevertheless, we believe that reliance



on coal for a substantial amount of electric power generation in the United States is likely to continue for the foreseeable future.

New regulations not only affect our suppliers and customers, but may also directly impact HCM's operations. HCM manages, stores, transports and sells fly ash, and some products manufactured and sold by HCM contain fly ash. As a CCP, fly ash previously had largely been exempted from the provisions of the RCRA. However, after several lawsuits from environmental organizations, the EPA issued the first regulation governing the disposal of CCPs. The final rule published in April 2015 regulates CCPs as non-hazardous waste under Subtitle D of the RCRA, avoiding some of the complications involved with a hazardous waste designation. Under the new rule, states retain primary authority to regulate the handling, storage, and disposal of CCPs as non-hazardous solid waste, subject to EPA oversight and approval. The new rule also preserves an exemption for CCPs when used for beneficial purposes.

Though the EPA's decision to regulate CCPs as solid waste under RCRA Subtitle D avoided the regulatory burdens and stigma that would have accompanied a hazardous waste designation, the new regulations still may require adjustments to our operations, and the complexity and cost of managing and disposing of CCPs could increase. HCM manages a number of landfill and pond operations that are subject to the 2015 rule. The rule establishes national minimum criteria for landfills and impoundments containing CCPs, and includes restrictions on their location, design and operation, as well as groundwater monitoring, recordkeeping, reporting and closure requirements. The new rule also requires closure of units unable to comply with the location requirements, units where groundwater contamination is detected, and units where the impoundment fails to meet minimum safety factors. A noncomplying impoundment must be shut down or retrofit within five years or seven years if granted an extension; impoundments over 40 acres may be eligible for up to five two-year extensions. Citizens and states now have the right to bring lawsuits to enforce the new rule against owners and operators. Since the rule was finalized, citizens and environmental organizations have brought several suits against the owners and operators of CCP impoundments.

The new rule affirms that beneficial uses of CCPs remain exempt from federal hazardous waste regulation under RCRA's "Bevill exclusion" and are not regulated under either RCRA Subtitle C or Subtitle D. Beneficial use is defined by the regulation to cover uses where CCPs provide a functional benefit, substitute for the use of a virgin material, meet the product specifications, and do not result in excess contamination. In February 2014, the EPA released a report determining that the use of fly ash in concrete constitutes a beneficial use, and the 2015 final rule specifically notes that the incorporation of fly ash in concrete, as a replacement for Portland cement, is one of "the most widely recognized beneficial applications" of CCPs. However, the EPA did not determine whether CCPs destined for disposal should continue to qualify for the Bevill exclusion and did not fully resolve uncertainties about whether certain CCP applications should be treated as beneficial use or disposal. Some environmental groups have urged the EPA to restrict other uses of CCPs, such as in road base, claiming that contaminants may leach into the environment. The final rule indicates that the use of CCPs in applications such as road base generally would qualify as beneficial use, so long as relevant regulations and guidelines are followed. The EPA has not stated whether or when it will reconsider the eligibility of CCPs intended for disposal for the Bevill exclusion. Eligibility depends on a complicated factual analysis, requiring information gathering that would likely take several years. If the EPA ultimately determines to regulate CCPs intended for disposal as hazardous waste under RCRA Subtitle C, those CCPs would become subject to a variety of regulations governing the handling, transporting, storing and disposing of hazardous waste. This could reduce the demand for fly ash and other CCPs and increase the regulatory burden and costs of fly ash management for the utility industry and for HCM, with a potential material adverse impact on our operations and financial condition.

Both industry and environmental organizations challenged the 2015 rule. The EPA voluntarily remanded certain provisions of the rule for further proceedings. The most significant of these were an exemption from certain post-closure requirements for inactive surface impoundments, a regulation describing the type and magnitude of non-groundwater releases triggering corrective action procedures, and the provisions regarding the applicability of new Alternative Closure procedures. The EPA extended the compliance deadline for inactive surface impoundments in a direct final rule in August 2016, and the agency anticipates releasing a proposed rule on the remaining remanded issues by late 2017. In September 2016, the United States Commission on Civil Rights issued a report which determined that CCP disposal facilities can negatively impact environmental justice communities. While the Commission cannot require changes to EPA regulations, environmental organizations may seek to use the Commission's report to spur the EPA to make regulatory changes.

In addition to spurring litigation, the 2015 rule also drew attention from Congress. In response to the 2015 coal ash rule, Congress initiated several legislative proposals to address CCP disposal. The two most prominent of these are

H.R. 1734, which passed the House in July 2015, and S. 2848, which passed the Senate in September 2016. Both bills would create a national permit program for CCPs that states may elect to administer in accordance with the federal guidelines. No action has been taken on H.R. 1734 in the Senate and the outcome is similarly uncertain for S. 2848.

HCM manages a number of landfill and pond operations that may be affected by new Clean Water Act requirements. In September 2015, the EPA issued a final rule for Clean Water Act effluent limitation guidelines for steam electric power generating facilities which requires discharges from waste streams and surface impoundments to meet certain limits. This rule will directly affect landfill and pond operations managed by HCM and may expose HCM to increased liability. The requirements will phase in between 2018 and 2023, and will require project owners and HCM to implement pollution control measures to reduce or eliminate discharges of various materials from waste streams and surface impoundments.

At HTI, we have worked at the molecular level in the use of nanocatalysts. A number of agencies are studying the potential implications of nanotechnology and manufactured nanomaterials on human health and the environment, including the National Toxicology Program, the National Institute for Safety and Health, the National Science Foundation and the EPA. Under the Toxic Substances and Control Act (“TSCA”), the EPA can determine that a use of a chemical substance consists of a “significant new use.” In September 2010, the EPA adopted its first rule regulating carbon nanomaterials under TSCA and has since issued final significant new use rulings for five other carbon nanomaterials. The significant new use rulings require persons intending to manufacture, import, or process one of the covered materials to notify the EPA at least 90 days before commencing that activity and also place certain restrictions on their use and manufacture. In July 2016, the Frank R. Lautenberg Chemical Safety for the 21st Century Act considerably amended TSCA’s risk assessment and testing mechanisms for new and existing chemicals. Under the amended TSCA, the EPA is mandated by strict, enforceable deadlines to prioritize existing chemicals as either high or low priority substances and to conduct risk assessments for high priority substances. In addition, under the TSCA amendments, the EPA can no longer consider costs when conducting risk assessments and must consider susceptible subpopulations (e.g., infants, elderly, and pregnant women). To fund this new initiative, the EPA is authorized to collect up to \$25 million annually from chemical manufacturers and processors. It is not known whether future risk assessments will cover chemicals used in HTI products or the processes of HTI’s suppliers.

In July 2016, the EPA proposed to change significant new use rules to align with revisions to the Occupational Safety and Health Administration (“OSHA”) Hazard Communications Standard, the United Nations’ Globally Harmonized System of Classification and Labelling of Chemicals, and OSHA’s Respiratory Protection Standard concerning respiratory protection from exposure to chemicals. Manufacturers and processors of petroleum and coal products may potentially be affected, but the EPA estimates that increased costs of compliance will be minor. On October 7, 2016, the EPA submitted finalized a rule that requires the reporting and recordkeeping of information on certain chemical substances manufactured or processed as nanoscale materials. This rule would require persons that manufacture or process certain chemical substances on the nanoscale level to report information electronically to the EPA, including the chemical identity, production volume, exposure and release information, and existing data regarding environmental and health effects. While these developments demonstrate increasing interest in this area, at this time it is not certain what further nanotechnology regulations may be adopted and how they may affect our business.

## Employees

As of September 30, 2016, we employed approximately 3,687 full-time employees, including approximately 45 who work under collective bargaining agreements.

The following table lists the approximate number of employees by business segment as of September 30, 2014, 2015, and 2016:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
Building Products	1,670	1,795	2,515
Construction Materials	920	952	1,091
Discontinued Operations	0	1	1
Energy Technology	35	36	34
Corporate	40	47	46
Total	<u>2,665</u>	<u>2,831</u>	<u>3,687</u>

## ITEM 1A. RISK FACTORS

### Risks Relating to Our Business

**The building products industry is experiencing modest growth and recent improvements in some of our end markets may not continue. Because our building products and to a lesser extent, our construction materials business, are dependent on residential construction and remodeling, our revenues could flatten or decrease as a result of events outside our control that impact home construction and home improvement activity, including economic factors specific to the building products industry and severe weather.**

Our residential building products business and to a lesser extent, our construction materials business, rely upon home repair and remodeling as well as new construction. Between 2007 and 2011, there was a severe slowing of new housing and remodeling and we experienced a significant slowdown in sales activity during these years. Although residential construction and remodeling activity has somewhat improved in recent years in certain regions of the United States, the homebuilding industry continues to experience activity at moderate levels. Modest consumer confidence, unsteady employment growth, limits on credit availability, rising building costs and other factors may adversely affect new construction or remodeling, resulting in continued slow improvement or a slowdown in new construction and repair and remodeling activities.

We, like many others in the building products industry, experienced a large drop in orders and a reduction in our margins in 2007 through 2011. In 2007-2009, we recorded significant goodwill impairments associated with our building products business. While some increased product demand has occurred in 2012 through 2016, we can provide no assurances that demand for building products will further improve in the near future. Downturns in United States and Canadian home improvement and remodeling and new construction or in specific regions of the North American economy where we have significant sales could adversely impact our end users and lower the demand for our products, which in turn could cause our net sales and net income to decrease.

Construction is seasonal and generally dependent on temperate weather conditions. The majority of our building products sales and a portion of our construction materials sales are in residential construction, which tends to slow down in the winter months. If there are severe weather events such as hurricanes or flooding, or other events outside of our control, construction activities will slow and there may be a negative effect on our revenues. For the winter months of late 2016 and early 2017, our decreased seasonal revenues from our building products and construction materials businesses may result in negative cash flow.

Reference is made to the discussion of the October 1, 2016 change in segment reporting as it pertains to our block product business, included in *Item 1: "Business"* in this Form 10-K.

**Tight credit markets could negatively affect our business, results of operations, and financial condition. Construction lending has increased slowly since its low in early 2013, which continues to adversely affect liquidity for builders, home purchasers and remodelers in 2016 and 2017.**

The financial crisis of the banking system and financial markets beginning in 2008 and the going concern threats to banks, governments, and other financial institutions resulted in tight credit markets, including home construction lending, mortgages and home equity loans. Low liquidity for builders, homebuyers and remodelers or a tightening of construction or mortgage lending requirements could adversely affect the availability of capital for purchasers of our products and thereby reduce our sales.

There could be a number of follow-on effects on our business from limited credit and low liquidity of builders, prospective homebuyers or remodelers, including reduced ability to purchase our building products. These and other similar factors could:

- cause delay or decisions to not undertake new home construction or improvement projects;
- cause our customers to delay or decide not to purchase our building products; and
- lead to a decline in customer transactions and our financial performance.

**Our building products and construction materials businesses have been strengthened by the sales growth of new products. If we are unable to offer new products and expand our new product sales, our revenue growth may be adversely affected.**

Part of our building products and construction materials revenues have come from sales in new product categories. New products require innovation, research, capital for development, manufacturing, and acquisition activities. If we are unable to sustain new product sales growth, whether for lack of new product development, access to adequate capital or for other reasons, sales will follow any future general industry slowdown in construction, which will negatively affect our revenue and growth.

**Demand for our building products and construction materials may decrease because of changes in customer or designer preferences or because competing products gain price advantages. If demand for our products declines, our revenues will decrease.**

Our building products and construction materials are subject to reductions in customer demand for reasons such as changes in preferred home and other building sizes, materials, colors and styles. Many of our resin-based siding accessory products are complementary to an owner's choice of vinyl as a siding material. If sales of vinyl siding decrease, sale of our accessories may also decrease. Sales of our manufactured architectural stone and concrete block products are dependent on the continuing popularity of stone and block finishes. Similarly, we rely upon architects and other designers to specify block and other building products that we produce.

Demand for our building products can also decline if competing products become relatively less expensive. For example, if costs of petroleum-based resins that are used to make vinyl siding and accessories increase faster than the costs of stucco, then stucco products, which we do not sell, will become more attractive from a price standpoint, and our vinyl siding and accessory sales may decrease. Manufactured architectural stone and specialty roofing materials could lose price competitiveness compared to other finishes. If demand for our building products and construction materials decline because of changes in the popularity or price advantages of our products, our revenues will be adversely affected.

**A significant increase in the price of materials used in the production of our building products and construction materials that cannot be passed on to customers could have a significant adverse effect on our operating income. Furthermore, we depend upon limited sources for certain key production materials, the interruption of which would materially disrupt our ability to manufacture and supply products, resulting in lost revenues and the potential loss of customers.**

Our manufactured architectural stone, concrete block and concrete roof products manufacturing processes require key production materials including cement, sand, manmade, natural, lightweight and other aggregates, oxides, rolled steel, packaging materials, and certain types of rubber-based products. The suppliers of these materials may experience shortages and capacity or supply constraints in meeting market demand that limit our ability to obtain needed production materials on a timely basis or at expected prices. We do not have long-term contracts with such suppliers. We do not maintain large inventories of production materials and alternative sources meeting our requirements could be difficult to arrange in the short term. A significant increase in the price of these materials that cannot be passed on to customers could have a significant adverse effect on our cost of sales and operating income. Additionally, our manufacturing and ability to provide products to our customers could be materially disrupted if this supply of materials was interrupted for any reason. Such an interruption and the resulting inability to supply our customers with manufactured stone, block and roof products could adversely impact our revenues and our relationships with our customers.

Certain of our resin-based siding, accessory, trim, composite roof, vinyl window and other products are manufactured from polypropylene, PVC and polyethylene, a large portion of which material is sold to us by a limited number of suppliers. The prices of polypropylene, PVC and polyethylene are primarily a function of manufacturing capacity, demand, and the prices of petrochemical feedstocks, crude oil and natural gas liquids. To a lesser extent, supply also depends upon the availability of recycled materials. Historically, the market prices of polypropylene, PVC, and polyethylene have fluctuated, with material price increases as recently as 2014. A significant increase in the price of polypropylene, polyethylene or PVC that cannot be passed on to customers could have a significant adverse effect on our cost of sales and operating income. We do not have long-term contracts with our polypropylene, polyethylene or PVC suppliers. We do not maintain large inventories of polypropylene, polyethylene or PVC and alternative sources could be difficult to arrange in the short term. Therefore, our manufacturing and ability to provide products to our customers could be materially disrupted if our supply of polypropylene, polyethylene or PVC were interrupted for any reason. Such an

interruption and the resulting inability to supply our customers with resin-based products could adversely impact our revenues and potentially our relationships with our customers.

**Interruption of our ability to manufacture and timely ship product orders could harm our reputation and result in lost revenues if customers turn to other sources for products.**

We produce most of our building products and some of our construction materials in a small number of key manufacturing plants primarily located in the United States and Mexico. Our manufacturing plants or our systems that track customer orders and production could be disrupted because of natural or manmade disasters, accidents, political unrest, terrorism, crime or other problems. Our building products and construction materials businesses are dependent upon rapid shipments to contractors and distributors of individual orders, a large portion of which orders are manufactured upon demand to meet customer specifications. If there is significant interruption of our order fulfillment for any reason, we are at risk of harming our reputation for speed and reliability with customers and losing short-term and long-term revenues if customers turn to alternative building product and construction material sources.

**Our construction materials business is dependent upon governmental infrastructure spending.**

Our fly ash and concrete block products, and to a much lesser extent, our other building products, are used in public infrastructure projects, which include the construction, maintenance, and improvement of highways, bridges, schools, prisons and similar projects. Our business is dependent on the level of federal, state, and local spending on these projects. We cannot be assured of the existence, amount, and timing of appropriations for government spending on these projects.

Federal and state budget deficits may continue to limit the funding available for infrastructure spending. The availability of credit affects the ability of states and other governmental entities such as cities and school districts to issue bonds to finance construction projects. In addition, infrastructure spending is adversely affected by regions where sluggish economies exist, leading to lower tax revenues and state government budgets. Shortages in state tax revenues can reduce the amounts spent on state infrastructure projects, even below amounts appropriated by the legislatures. Delays in state infrastructure spending can hurt our business. Further, rising construction and material prices constrain infrastructure construction budgets.

Similarly, we rely upon architects and other designers to specify the type of concrete block that we produce in certain commercial and institutional building projects. Our concrete block business faces competition from alternative building materials.

**If HCM's coal-fueled electric utility industry suppliers fail to provide HCM with high-value CCPs due to environmental regulations or otherwise, HCM's costs could increase and supply could fail to meet customer needs, potentially negatively impacting our profitability or hindering growth.**

HCM relies on the production of CCPs by coal-fueled electric utilities. HCM occasionally experiences delays and other problems, such as planned and unplanned outages, in obtaining high-value CCPs from its suppliers and may in the future be unable to obtain high-value CCPs on the scale and within the time frames required by HCM to meet customers' needs. The coal-burning electric utility and coal mining industries are facing a number of new and pending initiatives by regulatory authorities seeking to address air and water pollution, greenhouse gas emissions and management and disposal of CCPs, as described below. Although our business managing CCPs for utility customers may benefit from opportunities to manage compliance with some new regulatory requirements, increasingly strict requirements generally will increase the cost of doing business and may make coal burning less attractive for utilities. In recent years, multiple companies have announced plans to close coal-fired power plant units, or dropped plans to open new plants, citing the cost of compliance with pending or new environmental regulations and the relatively low cost of natural gas. A reduction in the use of coal as fuel causes a decline in the production and availability of fly ash, the key product in our construction materials business. The outcome of these developments cannot be predicted. To date, our business has not had a significant impact from plant closures because our national footprint allows us to move fly ash to satisfy demand; however, if closure of coal-powered plants continues, we may be adversely affected in the future.

Environmental regulation affecting the coal industry is ever-evolving, and federal and state regulation in recent years has imposed more stringent requirements regarding emission of air pollutants and other toxic chemicals, reduction of greenhouse gas emissions and water quality impacts from coal mining operations. See "Business—Regulation." To meet emissions levels, utilities have been required to make changes such as changing their fuel sources, installing expensive pollution control equipment and, in some cases, shutting down plant units. Adoption of more stringent

regulations governing coal combustion, water discharges and air emissions, or coal mining would likely have an adverse effect on the cost, quality, beneficial use and sales of CCPs. Faced with the prospect of more stringent regulations, litigation by environmental groups, and the relatively low cost of natural gas, an increasing number of electric utilities are reducing their portfolio of coal powered energy facilities. This reduction could increase if the Clean Power Plan is upheld, which urges states to substitute electricity generation from higher-emitting coal plants to low-emitting coal plants and zero-emitting renewable sources. See “Business—Regulation.” If HCM is unable to obtain CCPs or experiences a delay in the delivery of high-value or quality CCPs, HCM will have a reduced supply of CCPs to sell or may be forced to incur significant unanticipated expenses to secure alternative sources or to otherwise maintain supply to customers. Moreover, revenues could be adversely affected if CCP sales volumes cannot be maintained or if customers choose to find alternatives to HCM’s products.

**The EPA rule under RCRA to regulate the disposal of CCPs is likely to have an adverse effect on the cost of managing and disposing of CCPs. The heightened regulatory scrutiny of CCPs on the federal and potentially state level may have an adverse effect on the uses and demand for CCPs, and on HCM’s relationships with utilities.**

In April 2015, the EPA published a final rule to regulate the disposal of coal combustion residuals as solid (non-hazardous) waste under subtitle D of RCRA that became effective in October 2015. The rule established national minimum criteria for CCP landfills and impoundments consisting of location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements, post closure care, recordkeeping and reporting, and other requirements. The rule requires closure of facilities unable to comply with the new rule’s criteria within five to seven years. The new regulation has increased the complexity and cost of managing and disposing of CCPs. In response to the 2015 rule, Congress has considered several proposals to institute state-permitting programs for CCPs, subject to EPA oversight. While the passage of one of these laws may have a significant effect on the regulatory landscape, the outcome of these legislative attempts is not certain.

The EPA remains under significant pressure from environmental organizations, several of which have challenged the 2015 rule. Some environmental groups continue to urge the EPA to restrict certain beneficial uses of CCPs, such as in concrete, road base and soil stabilization, alleging contaminants may leach into the environment. The 2015 regulation created a definition of “beneficial use” that includes uses in concrete and road base, but changes in the definition could reduce the demand for fly ash and other CCPs which would have an adverse effect on HCM’s revenues. The EPA’s increased regulation of CCPs will likely cause utilities and power producers to impose greater restrictions on the use of CCPs by HCM and its customers. Restrictions imposed by utilities may narrow the types of potential customers to which HCM can market CCPs and limit their uses of CCPs, reducing HCM’s sales opportunities. Utilities are also likely to negotiate to shift actual or perceived liabilities associated with CCPs and their use to HCM through more onerous contract and indemnity obligations. This could harm HCM’s business by reducing the number of CCP management contracts or by increasing HCM’s exposure to the contingent risks associated with any new regulation of CCPs.

HCM has managed numerous large scale CCP disposal projects, primarily for coal fueled utilities and power producers. In addition, CCPs have beneficial use for road base, soil stabilization, and as large scale fill in contact with the ground. If the EPA decides to regulate CCPs as hazardous waste, HCM, together with CCP generators, could be subject to very expensive environmental cleanup, personal injury and other possible claims and liabilities.

**HCM primarily sells fly ash for use in concrete; if use of fly ash does not increase, HCM may not grow.**

HCM’s revenues primarily are derived from the sale of fly ash as a mineral admixture used as a partial replacement for portland cement in concrete products. HCM’s growth has been and continues to be dependent upon the increased use of fly ash in the production of concrete. HCM’s marketing initiatives emphasize the environmental, cost and performance advantages of partially replacing portland cement with fly ash in the production of concrete. HCM’s business is affected by the availability and cost of competing products in the regions where it conducts business. If portland cement or other competing replacement products are available at lower prices than fly ash because of transportation advantages or some other advantage, our sales of fly ash as a replacement for portland cement in concrete products could suffer, and HCM may not be able to grow or may experience a decline in revenue.

Further, utilities are switching fuel sources, changing boiler operations and introducing activated carbon and ammonia into the exhaust gas stream in an effort to decrease costs and to meet increasingly stringent emissions control regulations. All of these factors can have a negative effect on fly ash quantity and quality, including an increase in the amount of unburned carbon in fly ash and the presence of ammonia slip. We are attempting to address these challenges

with the development and/or commercialization of two technologies: RestoreAir™, which pre-treats unburned carbon particles and activated carbon in fly ash in order to minimize the particles' adverse effects, and ammonia slip mitigation, which counteracts the impact of ammonia contaminants in fly ash. Decreased quantity and quality of fly ash may impede the use of fly ash in the production of concrete, which would adversely affect HCM's revenue.

If the EPA decides to regulate the beneficial uses of CCPs, there would likely be an adverse effect on use and sales of CCPs and HCM's relationship with utilities. Some environmental groups continue to urge the EPA to restrict some beneficial uses of CCPs, such as in concrete, road base, and soil stabilization, alleging contaminants may leach into the environment. This could reduce the demand for fly ash and other CCPs which would have an adverse effect on our CCP revenues.

**Because demand for CCPs sold by HCM is affected by fluctuations in weather and construction cycles, HCM's revenues and net income could decrease significantly as a result of unexpected or severe weather.**

HCM manages and markets CCPs and uses CCPs to produce building products. Utilities produce CCPs year-round. In comparison, sales of CCPs are generally keyed to construction market demands that tend to follow national trends in construction with predictable increases during temperate seasons and decreases during periods of severe weather. HCM's CCP sales have historically reflected these seasonal trends, with the largest percentage of total annual revenues being realized in the quarters ended June 30 and September 30. Low seasonal demand normally results in reduced shipments and revenues in the quarters ended December 31 and March 31. The seasonal impact on HCM's revenue, together with the seasonal impact on building products revenues may result in negative cash flows for the winter months of late 2016 and early 2017.

**HES remains contingently responsible for certain covenants to the purchasers and for third-party liabilities transferred to the purchasers of our coal cleaning business.**

In September 2011, we adopted a plan to sell our coal cleaning business. In a series of three transactions during 2012 and 2013, we sold our 11 coal cleaning facilities and associated assets and liabilities which are presented as a discontinued operation. HES may have significant contingent liabilities to the purchasers, if our tax and other representations and warranties prove to be untrue, and to third parties, including land owners and regulatory authorities for site reclamation of disturbed mine lands, where purchasers fail to fulfill their assumed obligations, including the transfer of mining permits and associated reclamation and bonding obligations.

**Our information technology consolidation and continuous improvement initiatives may not result in the intended benefits and could harm our business.**

We strive to continuously take steps to restructure and achieve improvements in our business, including reorganization and reduction of some management and other employees, and changes in manufacturing, marketing, distribution, pricing and sales of products. In addition, we are in the process of consolidating our accounting, product order and fulfillment, and other information technology platforms. We may not realize the expected improvements to our business if we have made erroneous assumptions about our ability to successfully implement these changes, the demand for our products, and our ability to service that demand. If we are not successful, our information technology consolidation and restructuring efforts may be detrimental to our financial reporting, controls, service to customers and revenues which would have a material adverse effect on our business.

**Our business strategy to grow through acquisitions may result in integration costs and poor performance.**

An aspect of our business strategy continues to be the pursuit of growth through acquisitions of products or complementary businesses. While our ABL Revolver and our senior secured Term Loan Facility limit our ability to engage in acquisitions, to the extent we engage in acquisitions, our ability to successfully implement the transactions is subject to a number of risks, including difficulties in identifying acceptable acquisition candidates, consummating acquisitions on favorable terms and obtaining adequate financing, which may adversely affect our ability to develop new products and services and to compete in our markets.

During 2013-2016, we acquired multiple businesses, and if we do not successfully integrate newly acquired businesses with our existing businesses, we may not realize the expected benefits of the acquisitions, and the resources and attention required for successful integration may interrupt the business activities of acquired businesses and our existing businesses. Successful management and integration of acquisitions are subject to a number of risks, including difficulties in assimilating acquired operations, loss of key employees, diversion of management's attention from core business operations, assumption of contingent liabilities, incurrence of potentially significant write-offs, and various

employee issues, such as issues related to human resource benefit plans, and an increase in employment and discrimination claims and claims for workers' compensation. Each business acquisition also requires us to expand our operational and financial systems, which increases the complexity of our information technology systems. Implementation of controls, systems and procedures may be costly and time-consuming and may not be effective.

**Our new products and technologies may not be successfully developed, operated and marketed, which could affect our future profitability.**

Although we have developed or acquired new products and technologies, and plan to continue to do so, successful commercialization of these products and technologies and their associated businesses in many cases are in early stages. Commercial success will depend on our ability to fully develop the products and technologies and their businesses, including generating demand from customers. We may not be able to profitably operate our new businesses or market our products or technologies produced from them. For example, the sale of our heavy oil upgrading products is dependent on refineries operating under conditions suitable to the performance of our catalyst precursor products, which conditions may not be available.

**Our growth requires continued investment of capital. If we cannot invest additional capital into new and existing businesses, we may not be able to sustain or increase our growth.**

Our operations require both maintenance and growth capital. A key part of our business strategy has been to expand through complementary acquisitions, which has required significant capital. In addition, commercialization of new products and technologies has required and will require significant financial commitments. Our utility services business will require financial commitments such as performance bonds in order to grow and we have limited bonding capacity. Our building products and construction materials businesses also require significant capital expenditures. We estimate that our capital expenditure needs for 2017 will be approximately \$45-\$65 million. If we do not have sufficient capital to make equity investments in new projects or are limited by financial covenants from doing so, our growth may suffer. Many of our competitors, including large businesses in the building products, construction materials and heavy oil upgrading industries, have greater financial strength than us and may be able to enter our markets, make acquisitions and take advantage of other potential growth opportunities before we can.

**We could face additional potential liability claims relating to our products.**

We face an inherent business risk of exposure to product liability claims, including class actions, in the event that the use of any of our products results in personal injury or property damage. For example, we face personal injury, property damage, and environmental cleanup claims related to coal combustion products. In the event that any of our products proves to be defective, among other things, we may be responsible for damages related to any defective products and we may be required to recall or redesign such products. Because of the long useful life of our products, it is possible that latent defects might not appear for years. We often do not control the installation or use of our products. Improper use or installation can result in claims of defective products against our businesses. Product liability claims can be difficult and expensive to defend. Our insurance does not cover all liability claims relating to our products. Any insurance we maintain may not continue to be available on terms acceptable to us or such coverage may not be adequate for liabilities actually incurred. Insurance for product liability claims could become much more expensive or more difficult to obtain or might not be available at all. Further, any claim or product recall could result in adverse publicity against us, which could cause our sales to decline or increase our costs.

**Significant increases in energy and transportation costs that cannot be passed on to customers could have a significant adverse effect on operating income.**

We purchase a significant amount of energy from various sources to conduct our operations, including fossil fuels and electricity for production of building products and construction materials, and diesel fuel for distribution of our products and for production-related vehicles. In past years, fuel and other cost increases have increased truck and rail carrier transportation costs for our products and may do so again in the future. At times, severe weather, including flooding, earthquakes, and other traffic and transportation impairments and failures have reduced or eliminated access to roads and railways, leaving us with more expensive transportation alternatives. Transportation difficulties and cost increases have in the past and may in the future adversely affect service to customers, the results of our operations and our financial condition. Transportation prices and availability of all petroleum products are subject to political, economic and market factors that are generally outside of our control.



**We operate in industries subject to significant environmental regulation, and compliance with and changes in regulation could add significantly to the costs of conducting business.**

Our CCP operations and our customers and licensees are subject to federal, state, local and international environmental regulations that impose limitations on the discharge of pollutants into the air and water and establish standards for the treatment, storage and disposal of waste products, and impose liability for the costs of remediating contaminated sites, which add to the costs of doing business and expose us to potential damage claims and fines for non-compliance. If the costs of environmental compliance increase for any reason, we may not be able to pass on these costs to customers. In order to establish and operate heavy oil upgrading facilities and power plants and operations to collect and transport CCPs, we and our customers have obtained various state and local permits and must comply with processes and procedures that have been approved by regulatory authorities. These environmental requirements and any failure to comply could give rise to substantial environmental liabilities and damage claims and to substantial fines and penalties.

Our building products and construction materials manufacturing operations also are subject to environmental regulations and permit requirements governing activities such as the creation of dust, disposal of waste, discharge of water, and the transportation, storage and use of fuel and materials. If we cannot obtain or maintain required environmental permits for our existing and planned manufacturing facilities in a timely manner or at all, we may be subject to additional costs and fines.

Some of our research and development activities involve coal, oil, chemicals and energy technologies, including petroleum refining. As a result, petroleum and other regulated materials have been and are present in and on our properties. Regulatory noncompliance or accidental discharges, fires, or explosions, in spite of safeguards, could create environmental or safety liabilities. Therefore, our operations entail risk of environmental damage and injury to people, and we could incur liabilities in the future arising from the discharge of pollutants into the environment, waste disposal practices, or accidents, as well as changes in enforcement policies or newly discovered conditions.

**We are involved in litigation and claims for which we incur significant costs and are exposed to significant liability.**

We are a party to some significant legal proceedings and are subject to potential claims regarding operation of our business. These proceedings will require that we incur substantial costs, including attorneys' fees, managerial time and other personnel resources and costs in pursuing resolution, and adverse resolution of these proceedings could result in our payment of damages, materially adversely affect our income and reserves and damage our reputation. See "Business—Litigation."

**We have significant competition in our industries which may cause demand for our products and services to decrease.**

We experience significant competition in all of our segments and geographic regions. A failure to compete effectively or increased competition could lead to price cuts, reduced gross margins and loss of market share, which could decrease our profitability. Many of our competitors have greater financial, management and other resources than we have and may be able to take advantage of acquisitions and other opportunities more readily. In certain instances, we must compete on the basis of superior products and services, thereby increasing the costs of marketing our services to remain competitive. See "Business—Competition" for more information on the competition faced by us in each of our segments.

**If our internal controls over financial reporting are not adequate, our business and reputation could be harmed and we could be subject to regulatory scrutiny, civil or criminal penalties or stockholder litigation.**

Maintaining effective internal controls is necessary for us to produce reliable financial reports and is important in helping to prevent fraud and otherwise protect our business. Section 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") requires that we evaluate and report on our system of internal controls. If we fail to maintain the adequacy of our internal controls, our ability to rely on reported operating results to manage and protect our business could be harmed and we could be subject to regulatory scrutiny, civil or criminal penalties or stockholder litigation. Section 404 of the Sarbanes-Oxley Act also requires that our independent auditors report on our system of internal controls. We have documented and tested our system of internal controls to provide the basis for our reports in our relevant filings with the SEC. The growth and diversification of our business through acquisitions complicates the process of developing, documenting, maintaining and testing internal controls. Failure to remediate deficiencies in

existing controls or to implement required new or improved controls could harm our business or cause us to fail to meet our reporting obligations. No assurance can be given that in the future there may not be significant deficiencies or material weaknesses that would be required to be reported.

**Information technology vulnerabilities and cyberattacks on our networks could have a material adverse impact on our business and results of operations.**

We rely upon information technology to manage and conduct business, both internally and with our customers, suppliers and other third parties. Internet transactions involve the transmission and storage of data, including in certain instances customer and supplier business and personal information. Thus, maintaining the security of computers, computer networks and data storage resources is a critical issue for us and our customers and suppliers. Information technology system failures that cannot be promptly resolved are likely to result in lost revenues and harm to our business relationships.

Security breaches could result in reduced or lost ability to carry on our business and loss of and unauthorized access to confidential information. We have limited personnel and other resources to address information technology reliability and security of our computer networks and respond to known security incidents to minimize potential adverse impact. Experienced hackers, cybercriminals and perpetrators of threats may be able to penetrate our network security and misappropriate or compromise our confidential information or that of third parties, create system disruptions or cause shutdowns. These perpetrators of cyberattacks also may be able to develop and deploy viruses, worms, malware and other malicious software programs that attack our information and networks or otherwise exploit any security vulnerabilities of our information and networks. Techniques used to obtain unauthorized access to or sabotage systems change frequently and often are not recognized until long after being launched against a target so that we may be unable to anticipate these techniques or to implement adequate preventative measures. A breach of our IT systems and security measures as a result of third-party action, malware, employee error, malfeasance or otherwise could materially adversely impact our business and results of operations and expose us to customer, supplier, and other third party liabilities.

**Unauthorized use of or infringement claims regarding our proprietary intellectual property could adversely affect our ability to conduct our business.**

We rely primarily on a combination of trade secrets, patents, copyright and trademark laws and confidentiality procedures to protect our intellectual property. Despite these precautions, unauthorized third parties may misappropriate, infringe upon, copy or reverse engineer portions of our technology or products. Identification of unauthorized users of our intellectual property can be very difficult and enforcement and defense of rights can be costly. Manufactured architectural stone competitors, heavy oil upgrading competitors and other competitors operate in foreign countries where we may not detect unauthorized use of our intellectual property or where enforcement may be difficult. We do not know if current or future patent applications will be issued within the scope of the claims sought, if at all, or whether any patents issued will be challenged or invalidated. Our business could be harmed if we infringe upon the intellectual property rights of others. We have been, and may be in the future, notified that we may be infringing intellectual property rights possessed by third parties. If any such claims are asserted against us, we may seek to enter into royalty or licensing arrangements. There is a risk in these situations that no license will be available or that a license will not be available on reasonable terms, precluding our use of the applicable technology. Alternatively, we may decide to litigate such claims or attempt to design around the patented technology. In addition, patents may expire before they are a commercial success. To date, while no single patent or trademark is material to our business, except in HTI's heavy oil upgrading business which relies upon a limited number of material patents, the issues described in this paragraph have not resulted in significant cost or had an adverse impact on our business. Nevertheless, future actions could be costly and would divert the efforts and attention of our management and technical personnel.

**We are conducting business in foreign countries where intellectual property and other laws, as well as business conditions, may leave our intellectual property, products and technologies vulnerable to duplication by competitors and create uncertainties as to our legal rights against such competitors' actions.**

We have and expect to continue to use, license or otherwise make our products and technologies, available to persons and entities in foreign countries. There is a risk that foreign intellectual property laws will not protect our intellectual property to the same extent as under United States laws, leaving us vulnerable to competitors who may attempt to copy our products, processes or technologies. Our limited familiarity with, and the interpretation and enforcement of foreign laws, regulations and legal requirements involve some uncertainty. These uncertainties could limit the legal protection or recourse available to us. In addition, dependence on foreign licenses and conducting foreign

operations may subject us to increased risk from political change, ownership issues or repatriation or currency exchange concerns.

**Fluctuations in the value of currency may negatively affect our revenue and earnings.**

Doing business internationally exposes us to risks related to the value of one currency compared to another. For example, some of our revenues are generated by sales of goods produced in the U.S. to buyers in foreign countries. If the U.S. dollar strengthens relative to the currency of foreign purchasers, the relative cost of our goods to such purchasers may go up, and the demand for our products may decrease, reducing our revenues. Also, in cases where our debt or other obligations are in currencies different than the currency in which we earn revenue, we may lose money as a result of fluctuations in the exchange rates, decreasing our earnings.

**We are dependent on certain key personnel, the loss of whom could materially affect our financial performance and prospects.**

Our continued success depends to a large extent upon the continued services of our senior management and certain key employees. Each member of our senior management team has substantial experience and expertise in our industry and has made significant contributions to our growth and success. We do face the risk, however, that members of our senior management may not continue in their current positions and the loss of the services of any of these individuals could cause us to lose customers and reduce our net sales, lead to employee morale problems and the loss of key employees, or cause disruptions to our production. Also, we may be unable to find qualified individuals to replace any of the senior executive officers who leave our company.

**Risks Relating to our Common Stock**

**The price of our common stock historically has been volatile. This volatility may affect the price at which you could sell your common stock, and the sale of substantial amounts of our common stock could adversely affect the price of our common stock.**

The market price for our common stock has varied between a high of \$21.25 in April 2016 and a low of \$13.62 in January 2016 during the twelve-month period ended September 30, 2016. This volatility may affect the price at which you could sell your common stock, and the sale of substantial amounts of our common stock could adversely affect the price of our common stock. Our stock price is likely to continue to be volatile and subject to significant price and volume fluctuations in response to market and other factors, including the other factors discussed in “Risks Relating to Our Business;” variations in our quarterly operating results from our expectations or those of securities analysts or investors; downward revisions in securities analysts’ estimates; and announcement by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments.

In the past, following periods of volatility in the market price of their stock, many companies have been the subject of securities class action litigation. If we become involved in securities class action litigation in the future, it could result in substantial costs and diversion of our management’s attention and resources and could harm our stock price, business, prospects, results of operations and financial condition.

The broader stock market has experienced significant price and volume fluctuations in recent months and years. This volatility has affected the market prices of securities issued by many companies for reasons unrelated to their operating performance and may adversely affect the price of our common stock. In addition, our announcements of our quarterly operating results, changes in general conditions in the economy or the financial markets and other developments affecting us, our affiliates or our competitors could cause the market price of our common stock to fluctuate substantially.

**We have never paid dividends and do not anticipate paying any dividends on our common stock in the future, so any short-term return on your investment will depend on the market price of our common stock.**

We currently intend to retain any earnings to finance our operations and growth. The terms and conditions of our senior secured credit facility restrict and limit payments or distributions in respect of our common stock.

**Delaware law and our charter documents may impede or discourage a takeover, which could cause the market price of our shares to decline.**

We are a Delaware corporation, and the anti-takeover provisions of Delaware law impose various impediments to the ability of a third party to acquire control of us, even if a change in control would be beneficial to our existing

stockholders. In addition, our board of directors has the power, without stockholder approval, to designate the terms of one or more series of preferred stock and issue shares of preferred stock, including the adoption of a “poison pill,” which could be used defensively if a takeover is threatened. The ability of our board of directors to create and issue a new series of preferred stock and certain provisions of Delaware law and our certificate of incorporation and bylaws could impede a merger, takeover or other business combination involving us or discourage a potential acquirer from making a tender offer for our common stock, which, under certain circumstances, could reduce the market price of our common stock.

**Future sales of our common stock in the public market could cause our stock price to fall.**

The sale of substantial amounts of our common stock could adversely impact our stock price. As of September 30, 2016, we had outstanding approximately 74.2 million shares of our common stock and options to purchase approximately <0.1 million shares of our common stock (all of which were exercisable as of that date). We also had outstanding approximately 3.5 million stock appreciation rights as of September 30, 2016, of which approximately 3.3 million were exercisable. The sale or the availability for sale of a large number of shares of our common stock in the public market could cause the price of our common stock to decline.

**If securities or industry analysts do not publish research or publish unfavorable research about our business, our stock price and trading volume could decline.**

The trading market for our common stock relies in part on the research and reports that equity research analysts publish about us and our business. We have a relatively small number of equity research analysts providing coverage on our common stock. Equity research analysts may elect not to provide research coverage of our common stock, and such lack of research coverage may adversely affect the market price of our common stock. We do not have any control of the analysts or the content and opinions included in their reports. The price of our stock could decline if one or more equity research analysts downgrade our stock or issue other unfavorable commentary or research. If one or more equity research analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our stock could decrease, which in turn could cause our stock price or trading volume to decline.

**Risks Relating to Our Indebtedness**

**We have a substantial amount of indebtedness, which could have a material adverse effect on our financial condition and our ability to obtain financing in the future and to react to changes in our business.**

We have a substantial amount of debt, which requires significant principal and interest payments. As of September 30, 2016, we had approximately \$768.8 million face value of debt outstanding all of which related to our senior secured Term Loan Facility. We also have \$70.0 million of undrawn availability, subject to a borrowing base limitation, under the ABL Revolver. After giving effect to the borrowing base limitation and issuance of letters of credit, we had availability of approximately \$59.4 million under the ABL Revolver as of September 30, 2016.

Our significant amount of debt could have important consequences. For example, it could:

- make it more difficult for us to satisfy our obligations under our notes and the ABL Revolver;
- increase our vulnerability to adverse economic and general industry conditions, including interest rate fluctuations, because a portion of our borrowings, including those under the ABL Revolver, are and will continue to be at variable rates of interest;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our debt, which would reduce the availability of our cash flow from operations to fund working capital, capital expenditures or other general corporate purposes;
- limit our flexibility in planning for, or reacting to, changes in our business and industry;
- place us at a disadvantage compared to competitors that may have proportionately less debt;
- limit our ability to obtain additional debt or equity financing due to applicable financial and restrictive covenants in our debt agreements; and
- increase our cost of borrowing.

**Despite our current indebtedness levels, Headwaters Incorporated and its subsidiaries may still incur significant additional indebtedness. Incurring more indebtedness could increase the risks associated with our substantial indebtedness.**

Headwaters Incorporated and its subsidiaries may be able to incur substantial additional indebtedness, including additional secured indebtedness, in the future. The terms of the secured Term Loan Facility and the credit agreement

governing our ABL Revolver restrict, but do not completely prohibit us from doing so. We have \$70.0 million of undrawn availability under the ABL Revolver, subject to borrowing base limitations. After giving effect to the borrowing base limitation, we had availability of approximately \$59.4 million under the ABL Revolver as of September 30, 2016. In addition, the secured Term Loan Facility allows us to issue additional secured term loan notes under certain circumstances, which would be guaranteed by our subsidiary guarantors, would allow our foreign subsidiaries to incur additional debt, and would be structurally senior to our existing secured Term Loan Facility. In addition, the indentures do not prevent us from incurring other liabilities that do not constitute indebtedness. If new debt or other liabilities are added to our current debt levels, the related risks that we and our subsidiaries now face could intensify.

**If we default under the ABL Revolver, our Term Loan Facility, or other indebtedness, we may not be able to service our debt obligations.**

In the event of a default under the ABL Revolver, secured Term Loan Facility or other indebtedness, lenders could elect to declare all amounts borrowed, together with accrued and unpaid interest and other fees, to be due and payable. If such acceleration occurs, thereby permitting an acceleration of amounts outstanding under our debt obligations, we may not be able to repay the amounts due. Events of default are separately defined in each loan agreement or indenture, but include events such as failure to make payments when due, breach of covenants, default under certain other indebtedness, failure to satisfy judgments in excess of \$1.0 million, certain insolvency events and the occurrence of a material adverse effect (as defined in the ABL Revolver). The occurrence of an event of default could have serious consequences to our financial condition and results of operations, and could cause us to become bankrupt or insolvent.

**We may not be able to generate sufficient cash to service all of our indebtedness and may be forced to take other actions to satisfy our obligations under our indebtedness, which may not be successful.**

Our ability to make scheduled payments on or to refinance our debt obligations depends on our financial condition and operating performance, which is subject to prevailing economic and competitive conditions and to certain financial, business and other factors beyond our control. We will also be required to obtain the consent of the lenders under the ABL Revolver to refinance material portions of our indebtedness. We cannot assure you that we will maintain a level of cash flow from operating activities sufficient to permit us to pay the principal, premium, if any, and interest on our indebtedness.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to reduce or delay investments and capital expenditures, or to sell assets, seek additional capital or restructure or refinance our indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. If our operating results and available cash are insufficient to meet our debt service obligations, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet our debt service and other obligations. We may not be able to consummate those dispositions or to obtain the proceeds that we could realize from them, and these proceeds may not be adequate to meet any debt service obligations then due. Additionally, our debt agreements limit the use of the proceeds from any disposition; as a result, we may not be allowed, under these documents, to use proceeds from such dispositions to satisfy all current debt service obligations.

**Headwaters Incorporated is a holding company with no independent operations or assets. Repayment of our indebtedness is dependent on cash flow generated by our subsidiaries.**

Headwaters Incorporated is a holding company and repayment of our indebtedness is dependent upon cash flow generated by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Unless they are guarantors of our indebtedness, our subsidiaries do not have any obligation to pay amounts due on our notes or to make funds available for that purpose. Our subsidiaries may not be able to, or be permitted to, make distributions to enable us to make payments in respect of our indebtedness. For instance, if there is a default under the ABL Revolver, the ABL Borrowers will not be permitted to transfer funds to us to pay other indebtedness. Each of our subsidiaries is a distinct legal entity and, under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries. While our secured Term Loan Facility limits the ability of our subsidiaries to restrict the payment of dividends or make other intercompany payments to us, these limitations are subject to certain qualifications and exceptions. In the event that we do not receive distributions from our subsidiaries, we may be unable to make required principal and interest payments on our indebtedness.

**Our debt agreements impose significant operating and financial restrictions on us and our subsidiaries, which may prevent us from capitalizing on business opportunities.**

The agreement governing our secured Term Loan Facility and the credit agreement governing the ABL Revolver impose significant operating and financial restrictions on us. These restrictions limit our ability, among other things, to:

- incur additional indebtedness or issue certain disqualified stock and preferred stock;
- pay dividends or certain other distributions on our capital stock or repurchase our capital stock;
- make certain investments or other restricted payments;
- place restrictions on the ability of our restricted subsidiaries to pay dividends or make other payments to us;
- engage in transactions with affiliates;
- sell certain assets or merge with or into other companies;
- guarantee indebtedness; and
- create liens.

When (and for as long as) the availability under the ABL Revolver is less than a specified amount for a certain period of time, funds deposited into deposit accounts used for collections will be transferred on a daily basis into a blocked account with the administrative agent and applied to prepay loans under the ABL Revolver.

As a result of these covenants and restrictions, we may be limited in how we conduct our business and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot assure you that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, that we will be able to obtain waivers from the lenders and/or amend the covenants.

There are limitations on our ability to incur the full \$70.0 million of commitments under the ABL Revolver. Borrowings under our ABL Revolver are limited by a specified borrowing base consisting of a percentage of eligible accounts receivable and inventory, less customary reserves. In addition, under the ABL Revolver, a monthly fixed charge maintenance covenant would become applicable if excess availability under the ABL Revolver is at any time less than 12.5% of the total \$70 million of current revolving loan commitments, or \$8.75 million currently. As of September 30, 2016, availability under the ABL Revolver was approximately \$59.4 million. However, due primarily to the seasonality of our operations, it is possible that availability under the ABL Revolver could fall below the 12.5% threshold in a future period. If the covenant trigger were to occur, the ABL Borrowers would be required to satisfy and maintain on the last day of each month a fixed charge coverage ratio of at least 1.0x for the preceding twelve-month period. As of September 30, 2016, our fixed charge coverage ratio was approximately 1.9x. Our ability to meet the required fixed charge coverage ratio can be affected by events beyond our control, and we cannot assure you that we will meet this ratio. A breach of any of these covenants could result in a default under the ABL Revolver.

**ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2. PROPERTIES**

Our headquarters are located at 10701 South River Front Parkway, Suite 300, South Jordan, Utah 84095. The lease for this office space of approximately 25,000 square feet has a term expiring December 2023. The monthly rent is approximately \$49,000 for 2017, with certain adjustments for inflation plus expenses.

As of September 30, 2016, HBP owns or leases approximately 45 properties for its building products manufacturing, distribution, and sales operations. HBP has offices in Wixom, Michigan; San Marcos, California; Oceanside, California; Dallas, Texas; and Alleyton, Texas and has major manufacturing facilities in Metamora, Michigan; Elkland, Pennsylvania; Greencastle, Pennsylvania; Franklin, Ohio; Westfield, Massachusetts; Okeechobee, Florida; Oceanside, California; Alleyton, Texas; Dallas, Texas; Latta, South Carolina; Chatham, Ontario, Canada; and Rosarito, Mexico.

As of September 30, 2016, HCM owns or leases approximately 20 properties nationwide for its fly ash storage and distribution operations with East, Central, and West regional divisions. HCM also conducts operations at approximately 120 other sites via rights granted in various CCP through-put, handling and marketing contracts (for example, operating a storage or load-out facility located on utility-owned properties).

HTI owns approximately six acres in Lawrenceville, New Jersey where it maintains its principal office and research facility.

### ITEM 3. LEGAL PROCEEDINGS

The information set forth under the caption “Legal Matters” in Note 12 to the consolidated financial statements in Item 8 of this Form 10-K is incorporated herein by reference.

### ITEM 4. MINE SAFETY DISCLOSURES

Our discontinued coal cleaning operations were subject to regulation by the federal Mine Safety and Health Administration under the Federal Mine Safety and Health Act of 1977. Because one of Headwaters’ subsidiaries is currently performing permit reclamation responsibilities at one site, information concerning mine safety violations or other regulatory matters required by section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 106 of Regulation S-K (17 CFR 229.106) has been included in Exhibit 95 to this annual report.

## PART II

### ITEM 5. MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

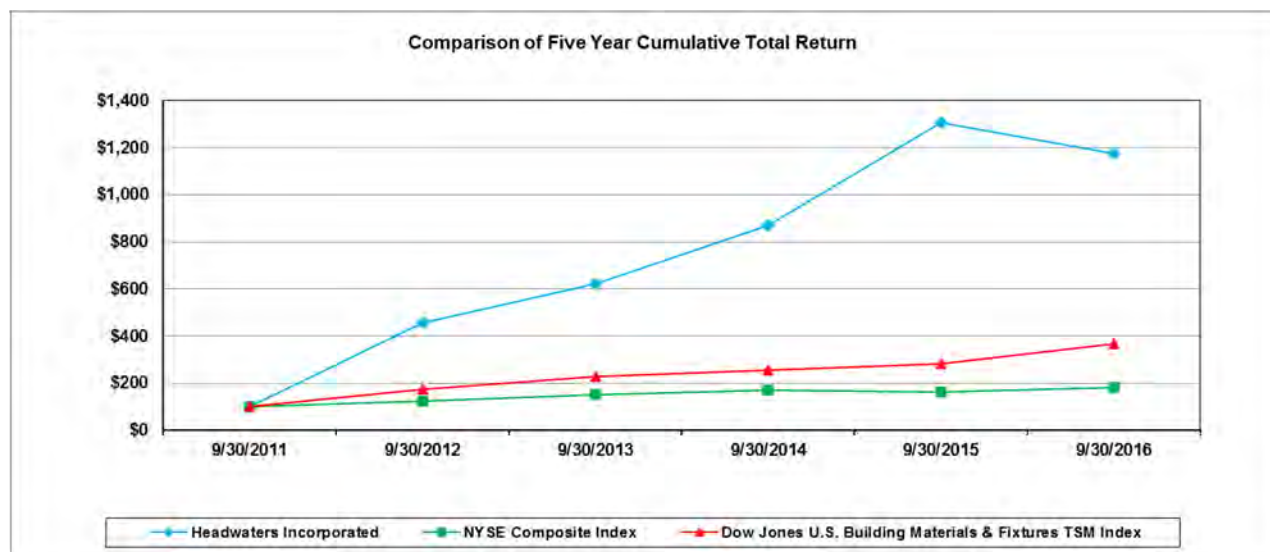
The shares of our common stock trade on the New York Stock Exchange under the symbol HW. Options on our common stock are traded on the Chicago Board Options Exchange under the symbol HQK. The following table sets forth the low and high trading prices of our common stock as reported by the New York Stock Exchange for 2015 and 2016.

<b>Fiscal 2015</b>	<b>Low</b>	<b>High</b>
Quarter ended December 31, 2014	\$ 10.54	\$ 15.17
Quarter ended March 31, 2015	13.37	18.50
Quarter ended June 30, 2015	17.51	20.31
Quarter ended September 30, 2015	13.41	21.76
<b>Fiscal 2016</b>		
Quarter ended December 31, 2015	\$ 16.55	\$ 20.93
Quarter ended March 31, 2016	13.62	19.89
Quarter ended June 30, 2016	16.49	21.25
Quarter ended September 30, 2016	16.34	20.05

The following graph shows a comparison of the cumulative total stockholder return, calculated on a dividend reinvestment basis, for September 30, 2011 through September 30, 2016, on our Common Stock with the New York Stock Exchange Composite Index and the Dow Jones US Building Materials & Fixtures TSM Index. The comparison assumes \$100 was invested on September 30, 2011. Historic stock price performance shown on the graph is not indicative of future price performance.

## COMPARISON OF FIVE YEAR CUMULATIVE TOTAL RETURN\*

Among Headwaters Incorporated, the NYSE Composite Index,  
and the Dow Jones US Building Materials & Fixtures TSM Index



\* \$100 invested on 9/30/11 in stock or index, including reinvestment of dividends. Fiscal year ended September 30.

As of October 31, 2016 there were 279 stockholders of record of our common stock. We have not paid dividends on our common stock to date and do not intend to pay dividends in the foreseeable future. Pursuant to the terms of our debt agreements (see Note 7 to the consolidated financial statements), we are prohibited from paying cash dividends. We intend to retain earnings to finance the development and expansion of our business. Payment of common stock dividends in the future will depend upon our debt covenants, our ability to generate earnings, our need for capital, our investment opportunities and our overall financial condition, among other things.

The information required by this item regarding equity compensation plans is incorporated by reference from the information set forth in Item 12 of this Annual Report on Form 10-K. See Note 10 to the consolidated financial statements for a description of securities authorized for issuance under equity compensation plans.

We did not have any sales of unregistered equity securities during the quarter ended September 30, 2016, but did purchase treasury stock. As described in Note 10 to the consolidated financial statements, we have a Directors' Deferred Compensation Plan (DDCP) under which non-employee directors can elect to defer certain compensation and choose from various options how the deferred compensation will be invested. One of the investment options is Headwaters common stock. When an eligible director chooses our common stock as an investment option, we purchase the common stock in open-market transactions in accordance with the director's request and hold the shares until such time as the deferred compensation obligation becomes payable. At such time, the treasury shares will be distributed to the director in satisfaction of the obligation.



The following table provides details about the treasury stock purchased in connection with the DDCP during the quarter ended September 30, 2016.

Period	Total Number of Shares Purchased	Average Price Paid per Share(1)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs
July 1, 2016 – July 31, 2016	0	n/a	n/a	n/a
August 1, 2016 – August 31, 2016	5,289	\$ 19.38	n/a	n/a
September 1, 2016 – September 30, 2016	0	n/a	n/a	n/a
<b>Total</b>	<b>5,289</b>	<b>\$ 19.38</b>	<b>n/a</b>	<b>n/a</b>

(1) Includes broker commissions.

## ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data are derived from our consolidated financial statements. This information should be read in conjunction with the consolidated financial statements, related notes and other financial information included in this Form 10-K. The selected financial data as of and for the years ended September 30, 2012 and 2013 and as of September 30, 2014 are derived from audited financial statements not included in this Form 10-K. The selected financial data as of September 30, 2015 and 2016 and for the years ended September 30, 2014, 2015, and 2016 were derived from our audited financial statements included in this Form 10-K.

As described in Note 2 to the consolidated financial statements, in connection with the adoption of ASU 2015-17, we have classified all deferred income taxes as noncurrent. Accordingly, certain amounts shown below for working capital, total assets, and long-term liabilities have changed from prior years' presentations. As described in Note 4, we have acquired several businesses, the operations of which are included in the operating data below only subsequent to the dates of acquisition. As described in Note 13, our coal cleaning business has been presented as a discontinued operation and is therefore not included in the results from continuing operations shown in the table below. As described in Notes 7 and 16, interest expense includes \$24.8 million of non-routine interest expense related to early repayments of debt in 2015 and \$8.7 million of non-routine expense in 2016. As described in Notes 9 and 16, in 2015 we released approximately \$109.3 million of the deferred income tax valuation allowance established in prior years, of which \$96.8 million represents a non-routine income tax benefit.

(in thousands, except per share data)	Year Ended September 30,				
	2012	2013	2014	2015	2016
<b>OPERATING DATA:</b>					
Total revenue	\$ 632,787	\$ 702,579	\$ 791,447	\$ 895,333	\$ 974,807
Income (loss) from continuing operations	(26,429)	8,285	16,473	132,128	49,679
Diluted income (loss) per share from continuing operations attributable to Headwaters Incorporated	(0.43)	0.12	0.21	1.74	0.64
(in thousands)	As of September 30,				
	2012	2013	2014	2015	2016
<b>BALANCE SHEET DATA:</b>					
Working capital	\$ 62,655	\$ 81,273	\$ 196,715	\$ 210,330	\$ 157,607
Net property, plant and equipment	159,706	159,619	182,111	185,718	206,792
Total assets	663,015	704,491	885,230	979,019	1,238,443
<b>Long-term liabilities:</b>					
Long-term debt	493,490	443,938	592,458	558,080	746,716
Other	31,486	27,569	40,752	36,776	41,230
Total long-term liabilities	524,976	471,507	633,210	594,856	787,946
Total stockholders' equity (net capital deficiency)	(3,129)	84,410	102,442	237,851	289,987

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

The following discussion and analysis should be read in conjunction with the information set forth under the caption entitled "ITEM 6. SELECTED FINANCIAL DATA" and the consolidated financial statements and related notes included in this Form 10-K. Our fiscal year ends on September 30 and unless otherwise noted, references to years refer to our fiscal year rather than a calendar year.

### Overview

*Consolidation and Segments.* The consolidated financial statements include the accounts of Headwaters, all of our subsidiaries, and other entities in which we have a controlling interest. All significant intercompany transactions and accounts are eliminated in consolidation. We currently operate primarily in two building materials-oriented business segments: building products and construction materials, and have several product lines within those segments. The end uses for our products and materials include new housing construction, residential repair and remodeling, and commercial, institutional and infrastructure construction. Our third non-core operating segment is energy technology.

*Operations and Products.* In the building products segment, we design, manufacture, and sell manufactured architectural stone, exterior siding accessories (such as shutters, mounting blocks, and vents), roofing materials, concrete block, windows and other building products. We manufacture our building products in approximately 25 locations. Revenues consist of product sales to wholesale and retail distributors, contractors and other users of building products.

Over the last several years, we have closed several acquisitions within our building products segment, as follows:

- In December 2012, we acquired the assets of Kleer Lumber, Inc., a manufacturer of PVC trim board and moulding products;
- In December 2013, we acquired 80% of the equity interests in the business of Roof Tile, Inc., a manufacturer of high quality concrete roof tiles and accessories sold primarily under the Entegra brand;
- In May 2014, we acquired the stone coated metal roofing business of Metals USA Building Products, L.P., the products of which are sold under the Gerard and Allmet brands;
- In fiscal 2015, we acquired two small businesses in the building products industry;
- In November 2015, we acquired 100% of the equity interests in several related companies, together which comprise a stone-coated metal roofing business known as Metro Roof Products;
- In December 2015, we acquired certain assets and assumed certain liabilities of Enviroshake Inc., a company that manufactures and sells composite roofing products;
- In January 2016, we acquired certain assets of a small decking and railing business;
- In April 2016, we completed the acquisition of a small concrete roof tile business; and
- In August 2016, we acquired the assets of Krestmark, a business that manufactures and sells high quality vinyl windows in the U.S.

Our construction materials business acquires fly ash from coal-fueled electric generating utilities. Using a nationwide storage and distribution network, we sell fly ash directly to concrete manufacturers who use it as a mineral admixture for the partial replacement of portland cement in concrete. In addition to fly ash and other coal combustion products (CCP) sales, revenues also include CCP disposal services provided to utilities. In 2014, we acquired two small

businesses in the CCP industry, and in March 2016 we completed the acquisition of Synthetic Materials, LLC, a synthetic gypsum processing and marketing business.

The non-core energy technology segment has been focused on reducing waste and increasing the value of energy-related feedstocks, primarily in the area of low-value oil. Revenues for the energy technology segment consist primarily of catalyst sales to oil refineries. In September 2011, we committed to a plan to sell our coal cleaning business and since then the coal cleaning business has been presented as a discontinued operation. In January 2013, we sold all of our remaining coal cleaning facilities.

*Building Products Segment.* Our strategy in the building products segment is to obtain growth with leadership economics, which includes four elements: (1) increase the number of products we are selling to core customers through internal development and bolt-on acquisitions; (2) focus on a total customer solution to value creation for our customers, rather than solely on price and product; (3) leverage our sales and marketing spend to core customers; and (4) standardize non-customer interfacing infrastructure. We believe we have successfully executed our strategy over the past several years, adding new trim, moulding, block, roofing and window products to our portfolio, while improving margins.

*Construction Materials Segment.* The four elements noted above for our building products segment are also operative for the construction materials segment. In addition, our strategy in this segment includes the negotiation of long-term contracts with suppliers, supported by investment in transportation and storage infrastructure for the marketing and sale of CCPs. Demand for CCPs is somewhat dependent on federal and state funding of infrastructure projects, and is associated with demand for portland cement. We are continuing our efforts to expand the demand for high-quality CCPs, develop more uses for lower-quality CCPs, and expand our CCP disposal services and site service revenue generated from CCP management.

*Seasonality and Weather.* Both our building products and construction materials segments are greatly impacted by seasonality. Accordingly, revenues and profitability are generally highest in the June and September quarters.

*Capitalization and Liquidity.* In December 2013, we issued \$150.0 million of 7¼% senior notes for net proceeds of approximately \$146.7 million. Most of those net proceeds were used to acquire some of the businesses described above.

In connection with several transactions during the March 2015 quarter, we significantly restructured our long-term debt, including repayment of our outstanding convertible senior subordinated notes. We entered into a new Term Loan Facility, under which a senior secured loan for \$425.0 million was obtained. This variable-rate loan currently carries an interest rate of 4.0% and matures in March 2022. The net proceeds of approximately \$414.7 million were used to pay the redemption price in connection with the redemption of all of the outstanding 7-5/8% senior secured notes which carried a maturity date of April 2019. Also, our ABL Revolver was amended to extend its maturity to March 2020, subject to certain early termination provisions, with more favorable interest rates.

In August 2016, we entered into an incremental amendment to the Term Loan Facility for an additional senior secured loan totaling \$350.0 million, with substantially the same terms as the original loan of \$425.0 million. Net proceeds were approximately \$341.6 million and were used to acquire Krestmark and to redeem the remaining outstanding \$99.0 million of the 7¼% senior notes.

Currently, except for the required repayments of the Term Loan Facility of approximately \$1.9 million per quarter, we have no expected debt maturities until March 2022. As of September 30, 2016, we had approximately \$65.3 million of cash on hand and total liquidity of approximately \$124.7 million. Additionally, we expect positive cash flow to be generated from operations over the next 12 months.

Capital expenditures for each of the fiscal years 2014 through 2016 ranged from approximately \$36.0 million to \$53.0 million, and are currently expected to be approximately \$45.0 million to \$65.0 million during 2017, depending largely on what growth opportunities are pursued.

In summary, our strategy for fiscal 2017 and subsequent years is to continue activities to improve operational efficiencies and reduce operating costs. We also plan to pursue growth opportunities through targeted capital expenditures and strategic acquisitions of niche products or entities that expand our current operating platform when opportunities arise.

### **Critical Accounting Policies and Estimates**

Our significant accounting policies are identified and described in Note 2 to the consolidated financial statements. The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect i) the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and ii) the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from those estimates.

We continually evaluate our policies and estimation procedures. Estimates are often based on historical experience and on assumptions that are believed to be reasonable under the circumstances, but which could change in the future. Some of our accounting policies and estimation procedures require the use of substantial judgment, and actual results could differ materially from the estimates underlying the amounts reported in the consolidated financial statements. Such policies and estimation procedures have been reviewed with our Audit Committee. The following is a discussion of our critical accounting policies and estimates.

*Income Taxes.* Significant estimates and judgments are routinely required in the calculation of our income tax provisions. We recognize potential liabilities for anticipated tax audit issues in the U.S. and state tax jurisdictions based on estimates of whether, and the extent to which, additional taxes and interest will be due. If events occur (or do not occur) as expected and the payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when it is determined the liabilities are no longer required to be recorded in the consolidated financial statements. If the estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result.

Beginning in 2011, we recorded a full valuation allowance on our net amortizable deferred tax assets and accordingly, did not recognize benefit for tax credit carryforwards, net operating loss (NOL) carryforwards or other deferred tax assets, except to the extent of earnings in 2014. We recorded approximately \$3.6 million of income tax expense in 2014, primarily due to state income taxes in certain state jurisdictions where we generated taxable income.

In 2015, we recorded an income tax benefit of approximately \$94.5 million, primarily due to the release of approximately \$109.3 million of the valuation allowance established in prior years. A valuation allowance is required when there is significant uncertainty as to the realizability of deferred tax assets. The ability to realize deferred tax assets is dependent upon our ability to generate sufficient taxable income within the carryforward periods provided for in the tax law for each tax jurisdiction. We considered the following possible sources of taxable income when assessing the realization of our deferred tax assets:

- future reversals of existing taxable temporary differences;
- future taxable income or loss, exclusive of reversing temporary differences and carryforwards;
- tax-planning strategies; and
- taxable income in prior carryback years.

We considered both positive and negative evidence in determining the continued need for a valuation allowance, including the following:

*Positive evidence:*

- Current forecasts indicated that we would generate pre-tax income and taxable income in the future.

- We had a three-year cumulative income as of September 30, 2015.
- A majority of our tax attributes have significant carryover periods of 20 years or more.

*Negative evidence:*

- We operate in cyclical industries that are difficult to forecast.

We placed more weight on objectively verifiable evidence than on other types of evidence and management believed that available positive evidence outweighed the available negative evidence. Management therefore determined that we met the “more likely than not” threshold that net operating losses (NOLs), tax credits and other deferred tax assets will be realized. Accordingly, a full valuation allowance was no longer deemed to be required as of September 30, 2015. A valuation allowance of approximately \$10.1 million was maintained against capital loss carryforwards, certain state NOL carryforwards, and certain tax credit carryforwards as of September 30, 2015.

All of the factors we considered in evaluating whether and when to release all or a portion of the deferred tax asset valuation allowance involved significant judgment. For example, there are many different interpretations of “cumulative income or losses in recent years” which can be used. Also, significant judgment is involved in making projections of future financial and taxable income, especially because our financial results are significantly dependent upon industry trends, including new housing construction, repair and remodeling, and infrastructure construction. Most of the end use categories in which we sell our products and services are currently in varying states of recovery from the historic downturn experienced in recent years; however, it is not possible to accurately predict whether recovery will continue, and if it does, at what rate and for how long.

In 2016, we recorded income tax expense of approximately \$22.8 million. The reported 31% effective rate for 2016 is the result of being subject to normal statutory rates following the valuation allowance reversal in 2015. The reported effective tax rate is less than the statutory rate primarily due to unrecognized income tax benefits that were reversed due to audit periods that closed and changes to prior year estimated amounts for research and development tax credits.

As of September 30, 2016, our U.S. and state NOL and capital loss carryforwards totaled approximately \$43.0 million (tax effected). The NOLs expire from 2017 to 2036. In addition, there are approximately \$27.4 million of tax credit carryforwards as of September 30, 2016, which expire from 2025 to 2036. A valuation allowance of approximately \$10.4 million was recorded against capital loss carryforwards, certain state NOL carryforwards, and certain tax credit carryforwards as of September 30, 2016.

As of September 30, 2016, we had approximately \$2.6 million of unrecognized income tax benefits related to uncertain tax positions. It is reasonably possible that the amount of our unrecognized income tax benefits could change significantly within the next 12 months. These changes could be the result of ongoing tax audits, the settlement of outstanding audit issues or the lapse of tax statutes of limitation. However, due to the issues being examined, at the current time, an estimate of the range of reasonably possible outcomes cannot be made, beyond amounts currently accrued. The calculation of tax liabilities involves uncertainties in the application of complex tax regulations in multiple tax jurisdictions, and we currently have open tax years subject to examination by the IRS and state tax authorities for the years 2013 through 2016. It is not possible to predict the outcome of future audits by the IRS or any other taxing authority.

*Litigation.* We have ongoing litigation and asserted claims which have been incurred during the normal course of business, including the specific matters discussed in Note 12 to the consolidated financial statements. We intend to vigorously defend or resolve these matters by settlement, as appropriate. Management does not currently believe that the outcome of these matters will have a material adverse effect on our operations, cash flow or financial position.

In accounting for legal matters, we follow the guidance in ASC Topic 450 Contingencies, under which loss contingencies are accounted for based upon the likelihood of the incurrence of a liability. If a loss contingency is “probable” and the amount of loss can be reasonably estimated, it is accrued. If a loss contingency is “probable” but the amount of loss cannot be reasonably estimated, disclosure is made. If a loss contingency is “reasonably possible,” disclosure is made, including the potential range of loss, if determinable. Loss contingencies that are “remote” are neither

accounted for nor disclosed. We record legal fees associated with loss contingencies when incurred and do not record estimated future legal fees. Management uses outside legal counsel to assist in estimating the likelihood of the existence of liabilities with regard to all significant legal matters.

We incurred approximately \$5.1 million, \$2.2 million and \$(1.4) million of expense (credit) for legal matters in 2014, 2015 and 2016, respectively. Except for 2014, when \$2.8 million of expense was recorded for potential losses, costs for outside legal counsel comprised a majority of our litigation-related costs in the years presented. We currently believe the range of potential loss for all unresolved legal matters, excluding costs for outside counsel, is from \$0 up to the amounts sought by claimants and have recorded a liability as of September 30, 2016 of \$0. The substantial claims and damages sought by claimants in excess of this amount are not currently deemed to be probable. Our outside counsel and management currently believe that unfavorable outcomes of outstanding litigation beyond the amount accrued are neither probable nor remote. Accordingly, management cannot express an opinion as to the ultimate amount, if any, of our liability, nor is it possible to estimate what litigation-related costs will be in future periods.

The specific matters discussed in Note 12 raise difficult and complex legal and factual issues, and the resolution of these issues is subject to many uncertainties, including the facts and circumstances of each case, the jurisdiction in which each case is brought, and the future decisions of juries, judges, and arbitrators. Therefore, although management believes that the claims asserted against us in the named cases lack merit, there is a possibility of material losses in excess of the amount accrued if one or more of the cases were to be determined adversely against us for a substantial amount of the damages asserted. It is possible that a change in the estimate of probable liability could occur, and the changes could be material. Additionally, as with any litigation, these proceedings require that we incur substantial costs, including attorneys' fees, managerial time and other personnel resources, in pursuing resolution.

*Acquisitions.* A component of our growth strategy has been to acquire and integrate businesses that complement our existing operations. We account for business combinations in accordance with ASC 805 Business Combinations, which requires that we estimate at the date of acquisition the fair values of all assets acquired and liabilities assumed in a transaction. Accounting for acquisitions requires us to make significant estimates and assumptions. While we believe the estimates and assumptions we have made for completed acquisitions have been reasonable and appropriate, they are based in part on historical experience, information obtained from management of the acquired companies, and other information available at the time, much of which is inherently uncertain and subject to refinement. During the measurement period, which can be up to one year from the acquisition date, we often record adjustments to the initial estimates of value. When such adjustments are made, a corresponding change is made to recorded goodwill. Following the measurement period, any necessary adjustments to acquired assets or assumed liabilities are reflected in our results of operations.

In determining the fair values of assets acquired and liabilities assumed, we use various recognized valuation methods, including present value modeling and market values when available. Valuations are performed by management, often with the assistance of independent valuation specialists under management's supervision. Valuation specialists are most often used in valuing intangible assets. They also assist in determining estimated useful lives over which the intangible assets should be amortized. Examples of critical factors in the valuation of intangible assets include estimates of future revenues and cash flows to be generated by the acquired business, market participant assumptions, and the determination of weighted cost of capital assumptions, royalty rates and terminal values.

Estimates are also required when a transaction involves contingent consideration, or when there are other contingent liabilities that may exist. We recognize the fair value of contingent consideration at the date of acquisition as part of the consideration transferred to acquire a business. Such liabilities are remeasured at fair value at the end of each reporting period. There have not been any material remeasurements of contingent consideration for any acquisition during the periods presented.

Acquisitions consummated during the periods presented are described in detail in Note 4 to the consolidated financial statements. As of September 30, 2016, there are several material acquisitions for which the measurement period has not closed.

*Valuation of Long-Lived Assets, including Property, Plant and Equipment, Intangible Assets and Goodwill.* Long-lived assets consist primarily of property, plant and equipment, intangible assets and goodwill. Intangible assets

consist primarily of identifiable intangible assets obtained in connection with acquisitions. Most of our intangible assets are being amortized, using the straight-line method, our best estimate of the pattern of economic benefit, over their estimated useful lives. We also have some indefinite-lived intangible assets, consisting primarily of certain tradenames, which are not amortized. Goodwill consists of the excess of the purchase price for businesses acquired over the acquisition-date fair values of identified assets, net of liabilities assumed.

Acquisition-date fair values of property, plant and equipment and intangible assets are estimated following the consummation of each business acquisition. Outside consultants are sometimes used to assist management in estimating the fair value of acquired property, plant and equipment, especially real estate, and in determining estimated useful lives of those assets. Outside consultants are almost always used to assist management in estimating the fair values of acquired intangible assets, and in determining their estimated useful lives.

In accordance with the requirements of ASC Topic 350 Intangibles—Goodwill and Other, we do not amortize goodwill or indefinite-lived intangible assets. ASC Topic 350 requires us to periodically test these assets for impairment, at least annually, or sooner if indicators of possible impairment arise. As described in Note 6 to the consolidated financial statements, we perform our annual impairment testing during the fourth quarter of our fiscal year, using a June 30 test date and a one- to three-step process, the first step of which is a qualitative assessment of the likelihood of an existing impairment. Our reporting units for purposes of impairment testing are the same as our operating segments. Long-lived assets other than goodwill and indefinite-lived intangible assets are evaluated for impairment only when indicators of potential impairment arise.

We evaluate, based on current events and circumstances, the carrying values of all long-lived assets, as well as the related amortization periods, to determine whether adjustments to these amounts or to the estimated useful lives are required. Changes in circumstances such as technological advances, or changes in our business model or capital strategy could result in actual useful lives differing from our current estimates. In those cases where we determine that the useful lives of property, plant and equipment or intangible assets should be changed, we amortize the net book value in excess of salvage value over the revised remaining useful life, thereby prospectively adjusting depreciation or amortization expense as necessary. In 2016, approximately \$2.1 million of accelerated depreciation and amortization was recognized due to changes in certain assets' useful lives. No other significant changes to estimated useful lives were made during the periods presented.

The carrying value of a long-lived asset other than goodwill or indefinite-lived intangible assets is considered impaired when the anticipated cumulative undiscounted cash flow from the use and eventual disposition of that asset is less than its carrying value. In that event, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the long-lived asset. Indicators of impairment include such things as a significant adverse change in legal factors or in the general business climate, a history of operating or cash flow losses, a decline in operating performance, a significant change in competition, or an expectation that significant assets will be sold or otherwise disposed of.

No material impairments of long-lived assets were recorded in any year presented. It is possible that some of our tangible or intangible long-lived assets or goodwill could be impaired in the future and that any resulting write-downs could be material.

In evaluating potential impairment of goodwill and indefinite-lived intangible assets, we follow the accounting rules described in Note 6 to the consolidated financial statements, whereby companies may evaluate qualitative factors, including macroeconomic conditions, industry and market considerations, overall financial performance and cost factors, to determine whether it is necessary to perform step 1 of the two-step impairment test. This qualitative evaluation is commonly referred to as "step 0." We concluded that it was more likely than not that the fair values exceeded the carrying amounts of goodwill and indefinite-lived intangible assets for both the building products and construction materials reporting units as of June 30, 2014, 2015 and 2016. Accordingly, further step 1 and step 2 testing for impairment was not required to be performed.

In summary, for both reporting units, general industry trends are more positive than in recent prior years, and the overall financial performance of these reporting units improved in 2014, in 2015 and again in 2016 as compared to

previous years. Based on currently available information and results of operations, management currently believes it is not likely there will be any material impairments of goodwill or indefinite-lived intangible assets in the near future.

### **Year Ended September 30, 2016 Compared to Year Ended September 30, 2015**

The information set forth below compares our operating results for the year ended September 30, 2016 with operating results for the year ended September 30, 2015. Except as noted, the references to captions in the Statements of Income refer to continuing operations only.

*Summary.* Our total revenue for 2016 was \$974.8 million, up 9% from \$895.3 million for 2015. Gross profit increased 7%, from \$269.9 million in 2015 to \$288.2 million in 2016. Operating income of \$102.1 million in 2015 improved by 8%, to \$110.7 million in 2016. Income from continuing operations was \$49.7 million, or \$0.64 per diluted share, for 2016, compared to \$132.1 million, or \$1.74 per diluted share, for 2015, with the decrease primarily due to a normalized income tax expense in 2016 compared to a significant income tax benefit in 2015 due to the release of deferred tax asset valuation allowances.

Net interest expense decreased from \$64.2 million in 2015 to \$42.4 million in 2016. Net interest expense included approximately \$24.8 million of incremental interest expense related to early debt repayments in 2015, and approximately \$10.1 million of non-routine expense related to early debt repayments and other debt transactions in 2016. Other income in 2016 includes gains on certain assets acquired in 2016 transactions. Discontinued operations were immaterial in both 2015 and 2016.

*Revenue and Gross Margins.* The major components of segment revenue, along with gross margins, are discussed in the sections below.

*Building Products Segment.* Building products revenue increased 14%, from \$523.6 million in 2015 to \$594.3 million in 2016. Gross profit increased 9% to \$170.4 million in 2016 from \$156.5 million in 2015, and operating income increased 2% to \$65.4 million from \$64.4 million.

Revenue growth in 2016 was due to higher sales in all of our major product groups as a result of demand driven volume increases and acquisitions completed in 2015 and 2016, partially offset by the impact of adverse weather in a number of our markets, including heavy rain in the Texas and Gulf regions. Led by our trim product, our siding products contributed significantly to overall segment revenue growth and margin expansion. Demand has also been strong in our non-residential Texas markets, offsetting any impact from low oil prices on residential construction. Operational improvement efforts in our stone and block categories also contributed to margin improvement. Several of our product groups continued to benefit from lower raw material, transportation and energy costs, which more than offset increased costs in other areas.

Underlying fundamentals of our end-markets continued to strengthen in 2016 as single family housing starts are growing modestly. Builders have experienced shortages in skilled labor and construction labor, which have contributed to a more gradual recovery, but demand remains strong for our building products used in new residential construction. Many repair and remodel markets across the country are also gradually improving, although roofing demand is somewhat dependent upon storm generated activity.

New housing construction and residential repair and remodeling, which experienced significant declines in activity several years ago, have seen some recovery in recent years, although the recovery has been uneven. There have been and continue to be significant regional differences in the strength of the improvement that has occurred. For example, the recovery has been more robust in some sections of the West and South, including Texas, as compared to parts of the Northeast, Southeast and Midwest regions, where growth has not been as strong. Continued low oil prices may impact growth in certain areas of Texas, such as Houston, but the Dallas market continues to have a strong new residential construction market. Regional differences in the health of housing construction impact the sales of our various product groups differently. It is not possible to know whether improved selling conditions and the housing recovery will be sustainable over the long-term.



According to the National Association of Home Builders (NAHB), new housing construction starts as of September 2016 were at a seasonally-adjusted annualized level of approximately 1.0 million units, compared to 1.0 million units and 1.1 million units in calendar 2014 and 2015, respectively. The most current 10- and 50-year averages for new housing starts were 1.0 million and 1.4 million units, respectively. During the last 57 years, the seven years with the lowest number of housing starts were the seven consecutive calendar years 2008 through 2014. According to a 2016 report by The Joint Center for Housing Studies of Harvard University, the U.S. homeownership rate has tumbled to its lowest level in nearly a half-century, but household growth is projected to average over 1.3 million units a year over the coming decade.

The National Association of Realtors reported that annual existing-home sales were at a seasonally adjusted rate of 5.5 million units in September 2016. For all of calendar 2015, there were 5.3 million units sold, compared to 4.9 million units sold in calendar 2014. Total housing inventory as of September 30, 2016 was 2.0 million existing homes for sale, representing a 4.5-month supply. This compares to a 4.8-month supply as of September 30, 2015 and a 4.3-month supply in May 2005, near the peak of the housing boom. The median sales price for existing homes of all types in September 2016 was 6% higher than in September 2015.

In recent years, some of our product offerings have been impacted by the continuing weakness in some sectors of repair and remodeling, including resin-based siding, which continues to be weaker than new housing construction. However, as noted above, some improvement has been observed in repair and remodeling activity recently. Key trends, such as rising home sales and values, indicate potential for further growth in repair and remodeling, which represents the largest end use for our products. As noted above, roofing repair and remodel markets can be negatively impacted by a lack of storm activity.

*Construction Materials Segment.* Construction materials revenue increased by 5% to \$370.4 million, compared to \$352.3 million in 2015. The increase in revenue is primarily attributable to positive pricing for high-value CCPs and the acquisition of SynMat in March 2016. Gross profit increased by 9% to \$112.0 million in 2016, compared to \$103.2 million in 2015, and gross margin increased by 90 basis points to 30.2%. Operating income increased \$11.1 million, or 17%, from \$65.0 million in 2015 to \$76.1 million in 2016, with a 210 basis point increase in operating margin. Improvements in gross profit and operating income and in the respective margins were primarily due to the continued favorable pricing environment as well as to cost management initiatives. The favorable pricing environment is the result of solid demand for high quality CCPs used to replace portland cement as well as the continued improvement in portland cement demand and pricing.

We believe that our fly ash supply in 2016 compared to 2015 was lower because of a temporary seasonal decline in fly ash production during the summer of 2016 due primarily to lower electricity demand and unusually low natural gas prices, both impacted by unseasonably mild temperatures. Sales volumes were also impacted by rain.

According to the Portland Cement Association's (PCA) most recent forecast, U.S. cement consumption is projected to increase approximately 3.4% in calendar 2016 and approximately 4.3% in calendar 2017. It is not possible to accurately predict the future trends of cement consumption, nor the precise correlation between cement usage and fly ash sales. Nevertheless, because fly ash is sold as an admixture for the partial replacement of portland cement in a wide variety of concrete uses—including infrastructure, commercial, and residential construction—statistics and trends for portland and blended cement sales can be an indicator for fly ash sales. In April 2015, the PCA's Chief Economist indicated that in 2013 a trough point was reached for road construction, which accounts for the largest amount of public cement consumption.

An important aspect of our strategy is to continue to increase our supply of high-value CCPs for marketing during the construction season. Low natural gas prices, EPA regulations, and reduced power demand, have combined to force the long-term shutdown, temporary idling, or lower utilization of multiple coal combustion power plant units, negatively impacting the supply of CCPs for beneficial use in certain areas. This trend has impacted somewhat our CCP supplies in certain regions of the country; however, we have multiple sources of supply and a broad distribution system, which allow us to move CCPs to locations where power plant units have closed. Reallocating CCP supplies can increase our transportation costs, some but not all of which we have historically been able to pass on to customers.

Weather, plant outages, limits on storage capacity and other factors can create short-term supply interruptions that sometimes result in CCP shortages in certain geographic areas. We are constantly seeking opportunities to increase the supply of high-value CCPs through incremental storage, conversion, blending, treatment, and new contracts. We are also working to develop fly ash sources which are not dependent upon current electricity generation. We have been actively involved in creative strategies to secure additional supplies, and believe that some of these strategies will be operational in 2017. For example, we believe that we can reclaim high quality fly ash previously disposed by utilities, and are currently working on this initiative at multiple sites. The American Coal Ash Association (ACAA) estimates that there are hundreds of millions of tons of potentially available CCPs, much of which we believe could be reclaimed for use as fly ash.

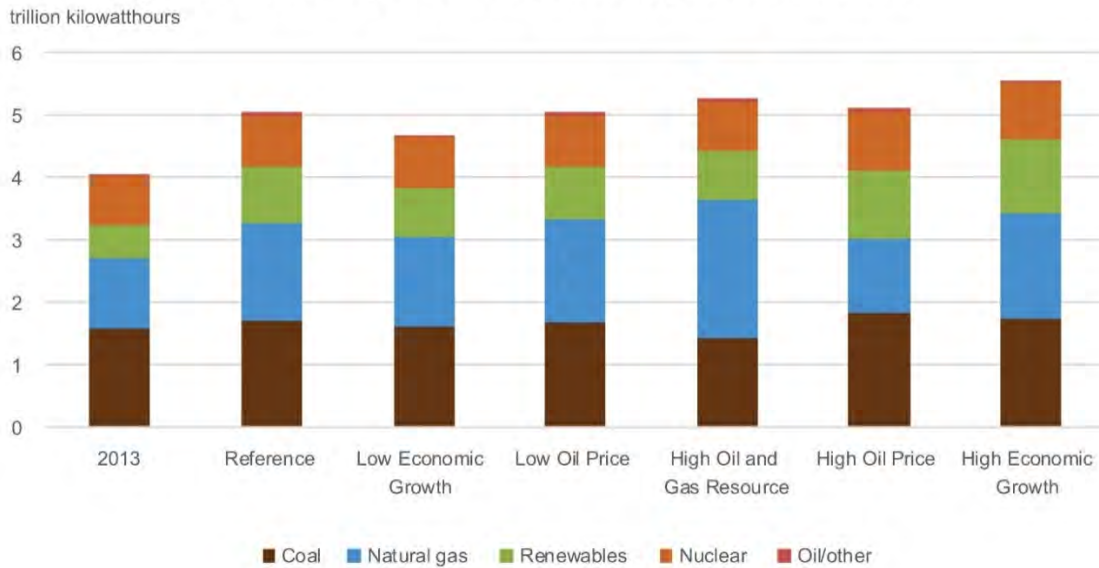
During 2016, the ACAA released findings on the U.S. production and utilization of CCPs, particularly fly ash. The ACAA report, which is based on an in-depth 2011 analysis by the American Road and Transportation Builders Association, takes into account the economic and political factors that have influenced production and utilization of CCPs over the last 40 years, and predicts the availability and demand for CCPs for the next 20 years. The forward looking projections take into account historic CCP data, projected electric generation from coal-fueled utilities, and the U.S. economy.

CCPs are used as a supplementary cementitious material, and are widely used along with cement in concrete mixtures to enhance the strength and durability of concrete structures. Data shows that using fly ash as a partial replacement for portland cement can almost double the life of a highway system. Demand for ready mixed concrete is a primary driver for fly ash utilization. The ACAA report stated, "The utilization rate of fly ash has grown from 8.4 percent of production in 1974 to 43.7 percent in 2013, when 23.3 million tons were beneficially used." The ACAA report continues, "Based on ready mixed concrete market projections, fly ash utilization is forecast to increase to 35.7 million tons in 2033 — a 53 percent cumulative increase over the next two decades." Beneficial uses of fly ash include grout, mining applications, structural fill, stabilization of soils and wastes, cement raw feed, and the partial replacement of portland cement in concrete.

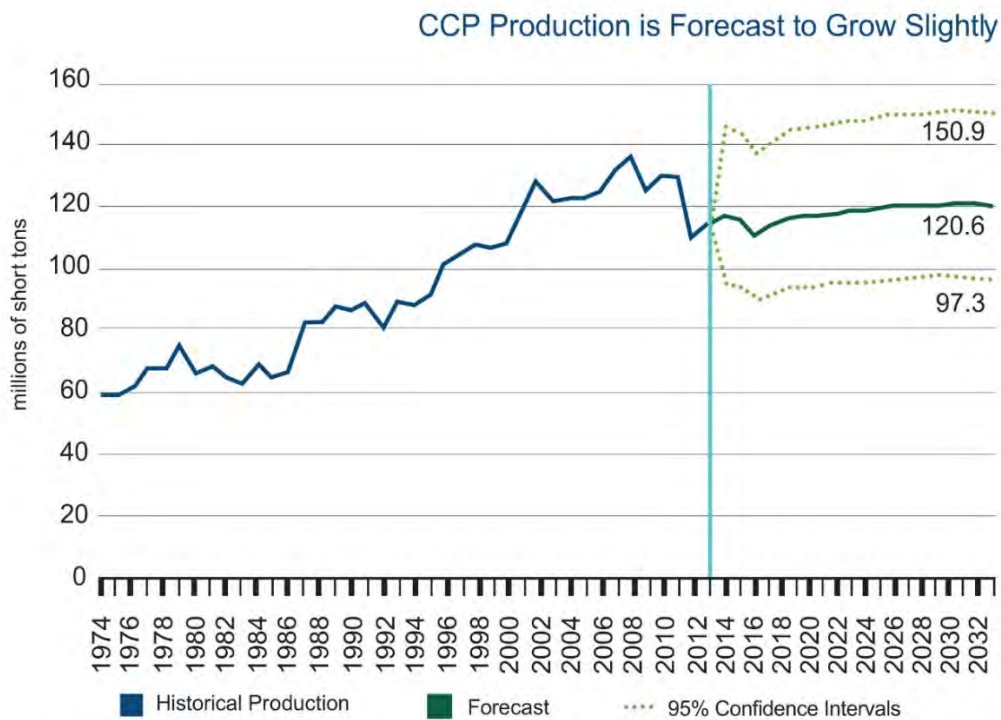
The report also predicts a steady supply of CCPs will be available due to anticipated growth in electricity demand. "Coal will continue to account for a significant percentage of U.S. electric generation during the next two decades. As a result, CCP production is expected to remain steady, increasing by 5 percent through 2033. Fly ash production is forecast to reach 54.6 million tons in 2033."

The following chart from the U.S. Energy Information Administration shows the potential significance of the major sources of electricity generation under several different scenarios, all of which show that coal will continue to be a major fuel source for many years to come.

### Electricity Generation by Fuel in Six Cases, 2013 and 2040



Also, as shown in the graph below from the American Road and Transportation Builders Association, CCP supply is expected to grow in the future even as electric generation remains relatively stable.



CCP production will increase 0.3 percent annually as coal demand for electric generation remains steady.

*Energy Technology Segment.* Energy technology segment revenue was not material for either 2016 or 2015. Revenue is primarily impacted by the timing of shipments to the three refineries which use our HCAT heavy oil upgrading catalyst. Shipments depend upon the timing of orders and customer onsite inventory levels.

*Operating Expenses.* Selling, general and administrative expenses increased 5% from 2015 to 2016 due primarily to approximately \$15.2 million of non-recurring and recurring expenses for the businesses acquired in fiscal 2015 and 2016, and to a lesser extent, organic growth in our operations. Partially offsetting these increases was lower employee incentive compensation in 2016. The change in amortization of intangible assets was due primarily to the amortizable intangible assets acquired in the 2015 and 2016 business acquisitions.

*Net Interest Expense.* In 2016, net interest expense decreased approximately \$21.8 million from 2015, due primarily to the debt restructuring that occurred in the March 2015 quarter. The 2015 restructuring transactions resulted in approximately \$24.8 million of incremental interest expense related to loss on extinguishment of senior secured debt and early repayments of convertible senior subordinated notes, which transactions are described in detail in Note 7 to the consolidated financial statements. In 2016, non-routine interest expense related to early debt repayments and other debt transactions was \$10.1 million. Also contributing to the decrease in interest expense in 2016 was a lower overall weighted average interest rate, resulting primarily from the 2015 debt restructuring. Based on our current debt structure and assuming no early debt repayments, interest expense is currently expected to be approximately \$34.0 million in 2017.

*Other Income.* Other income in 2016 consisted primarily of gains on certain assets being held for sale which were acquired in one of the 2016 business acquisitions. Provisional estimated values have been ascribed to the assets which have not yet been sold and at the current time there is significant uncertainty regarding the fair values of those assets. Accordingly, those provisional values could change in the future when final determinations of fair value for purchase accounting purposes have been completed. It is currently expected that additional gains could be realized in future periods as future sales transactions are consummated.

*Income Tax Provision.* In 2015, we recorded an income tax benefit of approximately \$94.5 million, primarily due to the release of approximately \$109.3 million of the valuation allowance established in prior years. A valuation allowance is required when there is significant uncertainty as to the realizability of deferred tax assets. See “*Critical Accounting Policies and Estimates – Income Taxes*” in this management discussion for a detailed discussion of this valuation allowance. In 2016, we recorded income tax expense at a normalized rate, but until our NOL and tax credit carryforwards are exhausted, current income taxes will be minimal, representing primarily state income taxes in certain state jurisdictions. Reference is made to Note 9 to the consolidated financial statements for details about the significant income tax benefit recorded in 2015 and the 31% effective tax rate for 2016.

*Discontinued Operations.* We recorded \$0.1 million of gain from discontinued operations in 2016 and (\$0.5) million of loss in 2015. The results for both periods include activity related to certain litigation which commenced prior to disposal of the business. Certain of this litigation was favorably settled during 2016, resulting in a gain of approximately \$3.6 million. In accordance with terms of the settlement agreement, we could receive additional cash receipts in the future, dependent primarily upon future coal sales by the buyer. Potential future cash receipts are being recognized in the periods when received.

We sold all of our coal cleaning facilities in 2012 and 2013, and recognized estimated gains on the sales dates. Subsequent to the dates of sale, adjustments of the previously recognized estimated gains on the sales transactions have been recorded. We currently expect that additional adjustments to the recognized gains and losses may be recorded in the future as certain contingencies are resolved. For all sales transactions, a majority of the consideration was in the form of potential production royalties and deferred purchase price, which amounts are dependent upon the buyer’s future production levels. Potential future production royalties and deferred purchase price on the sales transactions were not considered as being probable in the original gain calculations and are being accounted for in the periods if and when any such amounts are received. Coal markets in the U.S. have deteriorated since the coal cleaning facilities were sold and there were no cash receipts for royalties or deferred purchase price in 2015 or 2016.

In accordance with the terms of the asset purchase agreement for one of the sales transactions, the buyer of the coal cleaning facilities agreed to assume the lease and reclamation obligations related to certain of the facilities. Subsequent to the date of sale, our subsidiaries which sold the facilities amended the purchase agreement to provide the buyer with additional time to make payments, as well as fulfill contractual requirements related to the assumed reclamation obligations. One of our subsidiaries is currently performing permit reclamation responsibilities at one site. As of September 30, 2015 and 2016, approximately \$7.4 million and \$9.3 million, respectively, was accrued for this reclamation liability.

### **Year Ended September 30, 2015 Compared to Year Ended September 30, 2014**

The information set forth below compares our operating results for the year ended September 30, 2015 with operating results for the year ended September 30, 2014. Except as noted, the references to captions in the statements of income refer to continuing operations only.

*Summary.* Revenue for the year ended September 30, 2015 was \$895.3 million, up 13% from \$791.4 million for 2014. Gross profit increased 20%, from \$225.7 million in 2014 to \$269.9 million in 2015. Operating income of \$66.7 million in 2014 improved by 53%, to \$102.1 million in 2015. Income from continuing operations of \$16.5 million, or diluted income per share of \$0.21, in 2014 improved to \$132.1 million, or \$1.74 per diluted share, in 2015. The results for 2015 include \$24.8 million of incremental interest expense recorded in the March 2015 quarter related to early debt repayments. Results for 2015 also include the non-routine income tax benefit of \$96.8 million from reversal of the income tax valuation allowance. Net income attributable to Headwaters for 2015 including discontinued operations was \$130.8 million, or diluted income per share of \$1.73, compared to \$15.3 million, or \$0.20 per diluted share, in 2014.

*Revenue and Gross Margins.* The major components of segment revenue, along with gross margins, are discussed in the sections below.

*Building Products Segment.* Building products revenue increased 11%, from \$472.4 million in 2014 to \$523.6 million in 2015, as a result of organic growth and the acquisitions of Entegra and Gerard in December 2013 and May 2014, respectively. In 2015, gross profit increased by 15%, to \$156.5 million from \$136.2 million in 2014, and operating income increased by 37%, to \$64.4 million from \$46.9 million.

Revenues increased 5% organically for the year despite soft international sales which were impacted by the strong U.S. dollar and economic challenges in Canada and some overseas markets. Growth was wide-spread as all four of our major product groups had revenue growth in 2015. Product revenue associated with repair and remodeling construction continued to improve in 2015 as compared to 2014, despite difficult winter conditions in the Northeast during the March 2015 quarter and record rainfall in much of the U.S. during the June 2015 quarter.

Our Texas-based block product group performed particularly well as there was strong demand for both our standard block products as well as our higher-margin specialty blocks. Our block business' largest exposure is to the commercial and institutional end markets, and we experienced minimal revenue impact in 2015 from lower oil prices, which can affect the strength of the Texas economy. Product introductions also helped revenue growth in 2015 as many of our new products were well received by the market. For example, our new specialty siding product that we introduced in the March 2015 quarter resulted in sales that exceeded our first year expectations.

Gross margin increased by 110 basis points to 29.9% in 2015 and the operating income margin increased by 240 basis points in 2015, as compared to 2014. We benefitted from the decline in oil prices through lower diesel costs in our block group and lower resin costs in siding accessories and roofing. Lower raw material and energy costs, combined with operational improvements, more than offset increased costs in labor, cement and aggregates.

*Construction Materials Segment.* Construction materials revenue increased by 14%, to \$352.3 million in 2015, compared to \$309.3 million in 2014. The increase in revenue was primarily attributable to positive pricing and increases in the volume of high-value CCPs sold. The favorable pricing environment resulted from demand for high-quality CCPs to replace portland cement and continued strength in portland cement pricing. Service revenue represented approximately 21% of total segment revenue for 2015, compared to 25% for 2014. While site-service revenue typically has lower margins than our product sales, they are not as seasonal as construction spending. The smaller percentage of

service revenue to total segment revenue in 2015 as compared to 2014 was due to the completion of a number of service contracts early in the year, and from the growth in high-quality CCP sales.

Gross profit increased by 22% to \$103.2 million in 2015, compared to \$84.4 million in 2014, and gross margin increased by 200 basis points to more than 29%. The operating income margin increased by 180 basis points in 2015. The improved margins for the year resulted from a shift in product mix and continued cost reductions through continuous improvement.

*Energy Technology Segment.* Energy technology segment revenue in 2015 was \$19.4 million, compared to \$9.7 million in 2014, and gross profit in 2015 was \$10.2 million compared to \$5.1 million in 2014. Revenue and gross profit in 2015 benefited from profitable technology design contracts. Revenue in both years was impacted by the timing of shipments to the three refineries which used our HCAT heavy oil upgrading catalyst.

*Operating Expenses.* Selling, general and administrative expenses increased 9% from 2014 to 2015 due primarily to recurring expenses of the businesses acquired during 2014 and 2015, and, to a lesser extent, an increase in incentive-based compensation due to improved operating results in 2015. Amortization of intangible assets was lower in 2015 than in 2014 due to reduced amortization from fully amortized assets, partially offset by increased amortization of the assets acquired in the 2014 and 2015 business acquisitions.

*Net Interest Expense.* In 2015, net interest expense increased approximately \$17.9 million over 2014. This increase was due primarily to approximately \$24.8 million of non-routine interest expense related to the early repayments of debt during the March 2015 quarter which are described in detail in the *Liquidity and Capital Resources—Financing Activities* portion of this management discussion, partially offset by approximately \$8.0 million of reduced interest costs incurred in the last half of 2015, also a consequence of the debt restructuring that occurred in the March 2015 quarter.

*Income Tax Provision.* In 2014, we recorded a full valuation allowance on our net amortizable deferred tax assets and accordingly, did not recognize benefit for tax credit carryforwards, NOL carryforwards or other deferred tax assets, except to the extent of earnings in that year. In 2015, we recorded an income tax benefit of approximately \$94.5 million, primarily due to the release of approximately \$109.3 million of the valuation allowance established in prior years. A valuation allowance is required when there is significant uncertainty as to the realizability of deferred tax assets. See “*Critical Accounting Policies and Estimates—Income Taxes*” in this management discussion for a detailed discussion of this valuation allowance. Reference is made to Note 9 to the consolidated financial statements for details about the significant income tax benefit recorded in 2015 and the 18% effective tax rate for 2014.

*Discontinued Operations.* We recorded \$0.5 million of loss from discontinued operations in 2015, representing small amounts of operating losses (primarily expenses for certain litigation which commenced prior to disposal of the business), adjustments of the previously recognized estimated gains related to the coal cleaning facilities sold in January 2013, net of an income tax benefit. We recorded \$0.4 million of loss from discontinued operations in 2014, representing \$3.1 million of operating losses (primarily expenses for litigation) and \$2.7 million of gain related to the coal cleaning facilities sold in January 2013. The initial gain recorded on disposal was estimated, based on information available at the time, and in 2014, we received \$4.7 million of deferred purchase price payments, along with the collection of certain receivables which had been reserved.

## **Impact of Inflation and Related Matters**

In certain periods, some of our operations in the building products segment have been negatively impacted by increased raw materials costs for commodities such as polypropylene, poly-vinyl chloride (PVC), cement and aggregates. Currently, cement and aggregate costs are increasing, while resin costs are stable. In prior periods, we have experienced increases in our transportation costs in many parts of our business. We currently believe it is likely that raw materials and commodities such as fuels, along with the prices of other goods and services, could increase in future periods. We have passed certain increased costs to customers, but it is not possible to accurately predict the future trends of these costs, nor our ability to pass on future cost increases.

There has been a dramatic reduction in oil prices since the summer of 2014, which has had a positive effect on fuel and transportation costs during 2015 and 2016. If oil prices were to remain near their current low level for the long-term, the positive impact on costs may continue for some time, but manufacturers of resins are anticipating increased sales prices as they modify manufacturing capacity. Further, revenues in certain of our operations could be negatively affected by lower oil prices. For example, if oil prices remained low for an extended period of time, the Texas economy could be impacted, which in turn could impact some of our Texas-based revenues.

## **Liquidity and Capital Resources**

*Summary of Cash Flow Activities.* Net cash provided by operating activities in 2016 was approximately \$120.3 million, compared to net cash provided by operating activities of approximately \$81.7 million in 2015, a change of \$38.6 million. Most of this change was due to the \$81.9 million decrease in net income in 2016, which was more than offset by a \$119.5 million change related to deferred income taxes. The significant change in deferred taxes was caused by the release of substantially all of the valuation allowance in September 2015. In addition to the changes in net income and deferred income taxes, there were 1) an \$8.5 million increase in depreciation and amortization in 2016, primarily the result of several business acquisitions in 2016; 2) a \$12.9 million decrease in debt pre-payment premiums in 2016 compared to 2015; 3) a \$4.5 million gain on assets held for sale in 2016; and 4) a \$13.1 million increase related to collection of accounts receivable, primarily in the energy technology segment.

In 2016, our primary investing activities consisted of business acquisitions and capital expenditures, and in 2015 our primary investing activity consisted of capital expenditures. There were significant financing activities in both 2016 and 2015 related to the restructuring of our long-term debt in 2015, and both repayments on long-term debt and the issuance of long-term debt in 2016. More details about our investing and financing activities are provided in the following paragraphs.

*Investing Activities.* In 2016, we acquired five businesses in the building products industry and one business in the construction materials industry. Combined consideration paid for all of the 2016 acquisitions, net of cash acquired, was approximately \$342.4 million, subject to adjustment for certain final calculations of acquisition-date working capital, which calculations are currently expected to be finalized in the December 2016 quarter. Direct acquisition costs were not material.

In building products, we acquired 100% of the equity interests in several related companies, together which comprise a stone-coated metal roofing business located in California known as Metro Roof Products, and acquired certain assets and assumed certain liabilities of Enviroshake Inc., a Canadian company that manufactures and sells composite roofing products, primarily in the U.S. and Canada. We also acquired certain decking manufacturing assets which have been relocated to one of our current manufacturing sites. This acquisition provides an opportunity to expand distribution to existing customers, develop additional decking related products, and increase our product and manufacturing expertise. Our minority-owned subsidiary acquired all of the equity interests in several related companies, together which comprise a concrete roof tile business with operations primarily in Florida. This acquisition is expected to expand our presence in that niche roofing sector. Finally, we acquired substantially all of the assets and assumed certain liabilities of Krestmark Industries, L.P., a Texas-based business that manufactures and sells high quality vinyl windows in the U.S. This acquisition is a natural extension of our focus on supplying customers and homeowners with attractive products for the exterior of the home. In construction materials, we acquired 100% of the equity interests in a synthetic gypsum processing and marketing business known as Synthetic Materials, LLC, with operations in several locations in the Eastern U.S. This acquisition is expected to expand our presence in the CCP industry.

In 2015, we acquired the remaining 50% interest in a former equity method investee for a cash payment of approximately \$1.2 million, and the assets of another company for initial cash consideration of approximately \$4.5 million. Both of these companies are in the building products segment.

In 2015, a majority of capital expenditures for property, plant and equipment was for maintenance of operating capacity in our building products segment, with a smaller amount related to the construction materials segment and more discretionary expenditures for new product lines or projects. In 2016, capital expenditures were more evenly split between maintenance and growth. In both periods, a substantial majority of capital expenditures were made in the building products segment. Capital expenditures for 2017 are currently expected to be approximately \$45.0 million to

\$65.0 million, depending largely on what growth opportunities are pursued. Funding will come from working capital. As of September 30, 2016, we were committed to spend approximately \$3.6 million on capital projects that were in various stages of completion.

We intend to continue to expand our business through growth of existing operations in our core building materials segments. Acquisitions have historically been an important part of our long-term business strategy and we continue to look for bolt-on niche acquisitions that meet our criteria and enhance product offerings to our core customer base. Current debt agreements limit potential acquisitions and investments in joint ventures. The ABL Revolver limits potential acquisitions and investments in joint ventures if pro forma net excess availability is 20% or less of total potential availability under the facility.

Following the sale of all remaining coal cleaning facilities in 2013, there are no remaining assets held for sale from our discontinued operations. For all sales transactions, a majority of the consideration was in the form of potential production royalties and deferred purchase price, which amounts are dependent upon plant production levels. Potential future production royalties and deferred purchase price on the sales transactions were not considered as being probable in the original gain calculations and are being accounted for in the periods if and when any such amounts are received. There were no cash receipts for royalties or deferred purchase price in 2015 or 2016.

One of our subsidiaries is currently performing permit reclamation responsibilities at one former coal cleaning site. As of September 30, 2016, approximately \$9.3 million was accrued for this reclamation liability. It is not possible to accurately predict the timing or amounts of any future cash receipts or payments related to our discontinued coal cleaning business.

*Financing Activities.* In March 2015, we entered into a Term Loan Facility, under which a senior secured loan for \$425.0 million was obtained. In August 2016 we entered into an Incremental Amendment to the Term Loan Facility for an additional senior secured loan totaling \$350.0 million. Features and restrictions relating to the Term Loan Facility are described in Note 7 to the consolidated financial statements.

The Term Loan Facility requires scheduled quarterly repayments in an aggregate annual amount equal to approximately 1.0% of the original combined principal amounts (subject to reduction for certain permitted prepayments), with the balance due at maturity in March 2022. Except for the required repayments of the senior secured Term Loan Facility of approximately \$1.9 million per quarter, we have no expected debt maturities until March 2022. Pursuant to open market transactions during the March 2016 quarter, we repurchased and cancelled approximately \$3.75 million of the 7¼% senior notes. During the September 2016 quarter, we redeemed the remaining \$146.25 million of these notes at a redemption price equal to 103.625% of the principal amount. The associated premiums and accelerated amortization of debt issue costs aggregating approximately \$8.3 million for all transactions were charged to interest expense.

We may voluntarily repay outstanding loans under the Term Loan Facility at any time without premium or penalty, other than customary breakage costs with respect to LIBO rate loans, which shall be subject to a prepayment premium of 1.0%. The Term Loan Facility requires us to prepay outstanding term loans, subject to certain exceptions, with (i) up to 50% of our annual excess cash flow, as defined, to the extent such excess cash flow exceeds \$1.0 million, with such required prepayment to be reduced by the amount of voluntary prepayments of term loans and certain other types of senior secured debt; (ii) 100% of the net cash proceeds of certain non-ordinary course asset sales; and (iii) 100% of the net cash proceeds of certain issuances of debt. We were not required to make any prepayments under these requirements during 2015 or 2016.

The Term Loan Facility allows us to request one or more incremental term loans and certain other types of incremental debt in an aggregate amount not to exceed \$150.0 million plus an additional amount which is dependent on our pro forma net leverage ratio, as defined. Any additional borrowings are contingent upon the receipt of commitments by existing or additional lenders.

Headwaters is a holding company and repayment of our senior secured Term Loan Facility is dependent upon cash flow generated by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. In the event of a default, the ABL Revolver limits the ability of the ABL borrowers, all of which are our



subsidiaries, to make distributions to enable us to make payments in respect of our senior secured Term Loan Facility. There are no other significant contractual or governmental restrictions on our ability to obtain funds from our guarantor subsidiaries.

We were in compliance with all debt covenants as of September 30, 2016. The senior secured Term Loan Facility and ABL Revolver limit the incurrence of additional debt and liens on assets, prepayment of future new subordinated debt, merging or consolidating with another company, selling all or substantially all assets, making acquisitions and investments and the payment of dividends or distributions, among other things. In addition, if availability under the ABL Revolver is less than 12.5% of the total \$70.0 million commitment, or \$8.75 million currently, we are required to maintain a monthly fixed charge coverage ratio of at least 1.0x for the preceding twelve-month period.

There have been no borrowings under the ABL Revolver since it was put in place. The ABL Revolver has a termination date of March 2020, with a contingent provision for early termination at any time within three months prior to the earliest maturity date of the Term Loan Facility, at which time any amounts borrowed must be repaid. Availability under the ABL Revolver cannot exceed \$70.0 million, which includes a \$35.0 million sub-line for letters of credit and a \$10.5 million swingline facility. Availability under the ABL Revolver is further limited by the borrowing base valuations of the assets of our building products and construction materials segments which secure the borrowings, currently consisting of certain trade receivables and inventories. In addition to the first lien position on these assets, the ABL Revolver lenders have a second priority position on substantially all other assets.

As of September 30, 2016, availability under the ABL Revolver was approximately \$59.4 million. However, due primarily to the seasonality of our operations, the amount of availability varies from period to period and, while not currently expected, it is possible that the availability under the ABL Revolver could fall below the 12.5% threshold, or \$8.75 million, in a future period. As of September 30, 2016, our fixed charge coverage ratio, as defined in the ABL Revolver agreement, is approximately 1.9x. The fixed charge coverage ratio is calculated by dividing EBITDAR minus capital expenditures and cash payments for income taxes by fixed charges, as defined. EBITDAR consists of net income i) plus net interest expense, income taxes (as defined), depreciation and amortization, non-cash charges such as goodwill and other impairments, and rent expense; ii) plus or minus other specified adjustments such as equity earnings or loss in joint ventures. Fixed charges consist of cash payments for interest plus certain principal payments and rent expense.

If availability under the ABL Revolver were to decline below \$8.75 million at some future date and in addition the fixed charge coverage ratio was below 1.0x, the ABL Revolver lender could issue a notice of default. If a notice of default were to become imminent, we would seek an amendment to the ABL Revolver, or alternatively, a waiver of the availability requirement and/or fixed charge coverage ratio for a period of time. We do not currently believe it is likely we will reach the lower limits of both our ABL Revolver and the fixed charge coverage ratio. See Note 7 to the consolidated financial statements for more detailed descriptions of the terms of our long-term debt and our ABL Revolver.

In August 2015, we filed a universal shelf registration statement with the SEC. A prospectus supplement describing the terms of any future securities to be issued is required to be filed before any offering can commence under the registration statement.

*Working Capital.* As of September 30, 2016, our working capital was \$157.6 million (including \$65.3 million of cash and cash equivalents) compared to \$210.3 million as of September 30, 2015. We currently expect operations to produce positive cash flow during 2017 and in future years. We also currently believe working capital will be sufficient for our operating needs for the next 12 months, and that it will not be necessary to utilize borrowing capacity under the ABL Revolver for our seasonal operational cash needs in the foreseeable future.

*Income Taxes.* Cash outlays for income taxes were less than \$5.0 million for both 2016 and 2015. As of September 30, 2016, our U.S. and state NOL and capital loss carryforwards totaled approximately \$43.0 million (tax effected). The NOLs expire from 2017 to 2036. In addition, there are approximately \$27.4 million of tax credit carryforwards as of September 30, 2016, which expire from 2025 to 2036.

We do not currently expect cash outlays for income taxes during the next 12 months to be significant. Even though we are now recording income tax expense at a normalized rate of approximately 39%, until our NOL and tax credit carryforwards are exhausted, cash payments for income taxes will be minimal, representing primarily state income taxes in certain state jurisdictions.

*Summary of Future Cash Requirements.* Significant cash requirements for the next 12 months, beyond seasonal operational working capital requirements, consist primarily of capital expenditures and interest payments on long-term debt. In subsequent periods, significant cash requirements will include the repayment of debt. See Note 12 to the consolidated financial statements where the potential risks of litigation are described. Adverse conclusions to those legal matters could involve material amounts of cash outlays in future periods.

## Legal Matters

We have ongoing litigation and asserted claims which have been incurred during the normal course of business. Reference is made to Note 12 to the consolidated financial statements for a description of our accounting for legal costs and for other information about legal matters.

## Off-Balance Sheet Arrangements

As described in Note 12 to the consolidated financial statements, we have operating leases for certain facilities and equipment. Other than operating leases, we do not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on our financial condition, results of operations, liquidity, or capital resources.

## Contractual Obligations, Commitments and Contingent Liabilities

The following table presents a summary by period of our contractual cash obligations as of September 30, 2016.

(in millions)	Payments due by Fiscal Year				
	Total	2017	2018 - 2019	2020 - 2021	After 2021
Senior secured term loan	\$ 768.8	\$ 7.8	\$ 15.6	\$ 15.6	\$ 729.8
Interest payments on long-term debt	166.4	31.0	61.2	60.0	14.2
Unconditional purchase obligations	220.4	25.9	49.9	51.7	92.9
Operating lease obligations	177.2	34.1	50.0	38.2	54.9
Other long-term obligations	47.2	28.7	16.4	1.6	0.5
<b>Total contractual cash obligations</b>	<b>\$ 1,380.0</b>	<b>\$ 127.5</b>	<b>\$ 193.1</b>	<b>\$ 167.1</b>	<b>\$ 892.3</b>

As disclosed in Note 7 to the consolidated financial statements, we have no borrowings under our ABL Revolver as of September 30, 2016. The ABL Revolver provides for potential borrowings of up to \$70.0 million, which includes a \$35.0 million sub-line for letters of credit and a \$10.5 million swingline facility.

As disclosed in Note 4 to the consolidated financial statements, in connection with one business acquisition, approximately \$12.0 million of liabilities have been recorded for future estimated payments, all of which are currently expected to be made during 2017. This estimated amount has been included in the table above.

Reference is made to the caption "Compensation Arrangements" in Note 12 to the consolidated financial statements for a detailed discussion of potential commitments to certain officers and employees under employment agreements, executive change in control agreements, cash performance unit awards and cash-settled SARS. Amounts in addition to those included in the table above could become obligations under the terms of those agreements, depending upon the outcomes of the future events described in Note 12.

As described in Notes 10 and 12, we have two deferred compensation plans whereby directors, officers and certain employees can elect to defer receipt of certain compensation otherwise payable when earned. Our related

obligations to make payments under these plans, totaling approximately \$18.0 million as of September 30, 2016, have not been included in the table above because of the substantial uncertainty regarding timing of these payments.

We have ongoing litigation and asserted claims which have been incurred during the normal course of business, including the specific matters discussed in Note 12. We intend to vigorously defend or resolve these matters by settlement, as appropriate. We have recorded a liability of \$0 as of September 30, 2016 for all legal matters; however, it is not possible to know what amounts will ultimately be paid, nor when any such payments will occur and no amounts for legal matters have been included in the table above. We do not currently believe that the outcome of these matters will have a material adverse effect on our operations, cash flow or financial position. Final resolutions of these matters could affect the amounts included in the table.

As disclosed in Note 9 to the consolidated financial statements, we have certain unrecognized income tax benefits, including potential interest and penalties. At the current time, an estimate of the range of reasonably possible outcomes cannot be made beyond amounts currently accrued, nor can we reliably estimate the timing of any potential payments.

### **Recent Accounting Pronouncements**

See Note 2 to the consolidated financial statements for a discussion of accounting pronouncements that have been issued which we have not yet adopted.

### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK**

We are exposed to financial market risks, primarily related to our stock price and variable-rate debt. We do not use derivative financial instruments for speculative or trading purposes.

*Cash Performance Unit Awards.* As described in Note 12 to the consolidated financial statements, the Compensation Committee approved grants of performance unit awards to certain officers and employees based on the achievement of cash flow generated during 2014. The terms of the awards also provided for i) adjustment for changes in Headwaters' average stock price for the 60 days prior to and including September 30, 2014 as compared to Headwaters' average stock price for the 60 days prior to and including September 30, 2013, and ii) potential further adjustment based on cash flows generated in the two years subsequent to the year of grant, or base performance year. Approximately \$5.1 million of expense was recorded for the 2014 awards in 2014.

In 2015 and 2016, the Committee approved grants of performance unit awards to certain officers and employees for cash flow generated during those fiscal years, with terms similar to the 2014 awards described above. Approximately \$8.6 million and \$3.5 million of expense was recognized for these awards during 2015 and 2016, which amounts are subject to adjustment, depending on cash flows generated in future years. As of September 30, 2016, approximately \$13.7 million was accrued for all performance unit awards outstanding but unpaid as of that date.

*Cash-Settled SAR Grants.* As described in Note 12 to the consolidated financial statements, in 2012 the Committee approved grants to certain officers and employees of approximately 1.0 million cash-settled SARs, none of which remain outstanding as of September 30, 2016, the termination date of these awards. These SARs, which are considered liability awards, vested in annual installments through September 30, 2014 and were settled in cash upon exercise by the employee.

In 2011, the Committee approved grants to certain employees of approximately 0.4 million cash-settled SARs, none of which remained outstanding as of September 30, 2015, the termination date of these awards. Compensation expense/(income) for all cash-settled SARs was approximately \$4.6 million for 2014, \$3.1 million for 2015 and \$(0.1) million for 2016.

The portion of total cash-based compensation expense/(income) resulting from changes in our stock price for all of the performance unit awards and cash-settled SARs described above, was approximately \$6.1 million for both 2014 and 2015, and \$(0.5) million for 2016.

*Variable-Rate Debt.* As described in Note 7 to the consolidated financial statements, we have outstanding a variable-rate Term Loan Facility which currently bears interest at 4.0%. The interest rate cannot decrease below the current level but will increase if the eurocurrency (LIBO) rate exceeds the 1% floor. Assuming there were no change in the amount of debt outstanding and the LIBO rate did increase beyond the floor, a change in the interest rate of 1% could change our interest expense by up to approximately \$7.7 million per year. Also as described in Note 7, any future borrowings under our ABL Revolver will bear interest at a variable rate.

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

The financial statements and supplementary financial data required by this Item 8 are set forth in Item 15 of this Form 10-K. All information that has been omitted is either inapplicable or not required.

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

None.

## **ITEM 9A. CONTROLS AND PROCEDURES**

*Disclosure Controls and Procedures*—We maintain disclosure controls and procedures that are designed to ensure that information we are required to disclose in the reports that we file or submit under the Securities Exchange Act of 1934 (the Exchange Act), such as this Annual Report on Form 10-K, is recorded, processed, summarized and reported within the time periods specified by SEC rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information we are required to disclose in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including the Chief Executive Officer (CEO) and the Chief Financial Officer (CFO), to allow timely decisions regarding required disclosure.

Our management evaluated, with the participation of our CEO and CFO, the effectiveness of our disclosure controls and procedures as of September 30, 2016, pursuant to paragraph (b) of Rules 13a-15 and 15d-15 under the Exchange Act. This evaluation included a review of the controls' objectives and design, the operation of the controls, and the effect of the controls on the information presented in this Annual Report. Our management, including the CEO and CFO, do not expect that disclosure controls can or will prevent or detect all errors and all fraud, if any. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Our disclosure controls and procedures are designed to provide such reasonable assurance of achieving their objectives. Also, the projection of any evaluation of the disclosure controls and procedures to future periods is subject to the risk that the disclosure controls and procedures may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on their review and evaluation, and subject to the inherent limitations described above, our CEO and CFO have concluded that our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) were effective as of September 30, 2016 at the above-described reasonable assurance level.

*Internal Control over Financial Reporting*—Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control over financial reporting is designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Therefore, even internal controls determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. The effectiveness of our internal control over financial reporting is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the possibility of human error, and the risk of fraud. The projection of any evaluation of effectiveness to future periods is subject to the risk that controls may become inadequate because of

changes in conditions, or that the degree of compliance with policies may deteriorate. Because of these limitations, there can be no assurance that any system of internal control over financial reporting will be successful in preventing all errors or fraud or in making all material information known in a timely manner to the appropriate levels of management.

There has been no change in our internal control over financial reporting during the quarter ended September 30, 2016 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control system has been designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and presentation of our financial statements.

Our management has assessed the effectiveness of internal control over financial reporting as of September 30, 2016 using the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (2013)*. Based on that assessment, management believes that our internal control over financial reporting was effective as of September 30, 2016.

As described in Note 4 to the consolidated financial statements, we acquired several businesses during 2016. Most elements of the internal control over financial reporting for most of the acquired businesses have been integrated into Headwaters' internal control over financial reporting subsequent to the respective acquisition dates. However, management has excluded some elements of the internal control over financial reporting for Krestmark from our assessment of the internal control over financial reporting as of September 30, 2016. The total assets and net assets of Krestmark comprised approximately 20% and less than 1%, respectively, of the related consolidated amounts as of September 30, 2016. Krestmark's total revenue and net income comprised approximately 1% and 2%, respectively, of the related consolidated amounts for the year ended September 30, 2016.

BDO USA, LLP, the independent registered public accounting firm which audits our consolidated financial statements, has issued the following attestation report on the effectiveness of our internal control over financial reporting.

## Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Headwaters Incorporated  
South Jordan, Utah

We have audited Headwaters Incorporated's internal control over financial reporting as of September 30, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Headwaters Incorporated's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Item 9A, Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

As indicated in the accompanying "Item 9A, Management's Report on Internal Control over Financial Reporting," management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of Headwaters Windows, LLC (hereinafter referred to as "Krestmark"), which was acquired on August 19, 2016 and is included in the consolidated balance sheet of Headwaters Incorporated as of September 30, 2016, and the related consolidated statements of income, changes in stockholders' equity, and cash flows for the year then ended. Krestmark constituted 20% and less than 1% of total assets and net assets, respectively, as of September 30, 2016, and 1% and 2% of revenues and net income, respectively, for the year then ended. Management did not assess the effectiveness of internal control over financial reporting of Krestmark because of the timing of this acquisition which was completed on August 19, 2016. Our audit of internal control over financial reporting of Headwaters Incorporated also did not include an evaluation of the internal control over financial reporting of Krestmark.

In our opinion, Headwaters Incorporated maintained, in all material respects, effective internal control over financial reporting as of September 30, 2016, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Headwaters Incorporated as of September 30, 2015 and 2016, and the related consolidated statements of income, changes in stockholders' equity, and cash flows for each of the three years in the period ended September 30, 2016 and our report dated November 15, 2016 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Costa Mesa, California  
November 15, 2016

**ITEM 9B. OTHER INFORMATION**

None.

**PART III**

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

The applicable information to be set forth under the captions “Executive Officers,” “Corporate Governance,” “Section 16(a) Beneficial Ownership Reporting Compliance” and “Proposal No. 1—Election of Directors” in our Proxy Statement to be filed in January 2017 for the Annual Meeting of Stockholders to be held in 2017 (the “Proxy Statement”), is incorporated herein by reference.

**ITEM 11. EXECUTIVE COMPENSATION**

The applicable information to be set forth under the captions “Executive Compensation” and “Corporate Governance” in the Proxy Statement is incorporated herein by reference.

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

The information to be set forth under the captions “Summary Information about Incentive Compensation Plans” and “Security Ownership of Certain Beneficial Owners and Management” in the Proxy Statement is incorporated herein by reference.

**ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information to be set forth under the caption “Transactions with Related Persons” in the Proxy Statement is incorporated herein by reference.

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

The information to be set forth under the caption “Audit and Non-Audit Fees” in the Proxy Statement is incorporated herein by reference.

## PART IV

### ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

#### (a) 1. Financial Statements

<b><u>Consolidated Financial Statements of Headwaters Incorporated</u></b>	<b><u>Page</u></b>
Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of September 30, 2015 and 2016	F-2
Consolidated Statements of Income for the years ended September 30, 2014, 2015 and 2016	F-2
Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2014, 2015 and 2016	F-2
Consolidated Statements of Cash Flows for the years ended September 30, 2014, 2015 and 2016	F-2
Notes to Consolidated Financial Statements	F-2

#### 2. Financial Statement Schedules

All financial statement schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions, are inapplicable, or the required information has been provided in the consolidated financial statements or notes thereto.

#### 3. Listing of Exhibits

For convenience, the name Headwaters is used throughout this listing although in some cases the name Covol was used in the original instrument.

<b><u>Exhibit No.</u></b>	<b><u>Description</u></b>	<b><u>Location</u></b>
2.1	Asset Purchase Agreement between Krestmark Industries, L.P., et. al. and Headwaters dated as of August 1, 2016	(36)
3.1.9	Amended and Restated Certificate of Incorporation of Headwaters dated 1 March 2005	(4)
3.1.10	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Headwaters dated February 24, 2011	(18)
3.2.5	Amended and Restated By-Laws of Headwaters	(6)
3.2.6	Amendment of Amended and Restated By-Laws of Headwaters	(12)
4.2	Term Loan Credit Agreement dated as of March 24, 2015 among Headwaters, the guarantors party thereto, and Deutsche Bank as administrative agent	(32)
4.2.1	Amendment No. 1 to Term Loan Credit Agreement dated as of June 30, 2016 among Headwaters, the guarantors party thereto, and Deutsche Bank as administrative agent	(35)
4.2.2	Incremental Amendment to Term Loan Credit Agreement dated as of August 19, 2016 among Headwaters, the guarantors party thereto, and Deutsche Bank as administrative agent	(38)
4.9	Loan and Security Agreement dated as of October 27, 2009, among certain Headwaters subsidiaries and Bank of America, N.A. as the sole administrative agent, arranger and collateral agent, and the lenders named therein	(19)
4.9.1	First Amendment to Loan and Security Agreement among certain Headwaters subsidiaries and various lenders and First Amendment to Guaranty and Security Agreement, dated as of December 10, 2010	(16)



Exhibit No.	Description	Location
4.9.2	Second Amendment to Loan and Security Agreement and Second Amendment to Guaranty and Security Agreement, dated as of February 15, 2011 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(17)
4.9.3	Third Amendment to Loan and Security Agreement, dated as of April 15, 2011 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(20)
4.9.4	Fourth Amendment to Loan and Security Agreement and Third Amendment to Guaranty and Security Agreement, dated as of December 29, 2011 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(22)
4.9.5	Fifth Amendment to Loan and Security Agreement and Fourth Amendment to Guaranty and Security Agreement, dated as of April 26, 2012 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(24)
4.9.6	Sixth Amendment to Loan and Security Agreement, dated as of May 8, 2012 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(25)
4.9.7	Seventh Amendment to Loan and Security Agreement, dated as of December 13, 2012 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(26)
4.9.8	Eighth Amendment to Loan and Security Agreement and Fifth Amendment to Guaranty and Security Agreement, dated as of November 6, 2013 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(27)
4.9.9	Ninth Amendment to Loan and Security Agreement and Sixth Amendment to Guaranty and Security Agreement, dated as of December 9, 2013 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(28)
4.9.10	Tenth Amendment to Loan and Security Agreement, dated as of March 26, 2014 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(30)
4.9.11	Eleventh Amendment to Loan and Security Agreement and Seventh Amendment to Guaranty and Security Agreement, dated as of March 2, 2015 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(31)
4.9.12	Twelfth Amendment to Loan and Security Agreement and Eighth Amendment to Guaranty and Security Agreement, dated as of August 1, 2016 among Headwaters, certain Headwaters subsidiaries and certain lenders named therein	(36)
10.60	Amended and Restated Employment Agreement with Kirk A. Benson dated as of August 1, 2016	(37)
10.103	Employment agreement dated December 8, 2010 between Headwaters and Donald P. Newman	(15)
12	Computation of ratio of earnings to combined fixed charges and preferred stock dividends	*
14	Code of Ethics	(3)
21	List of Subsidiaries of Headwaters	*
23	Consent of BDO USA, LLP	*
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chief Executive Officer	*
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer	*
32	Section 1350 Certifications of Chief Executive Officer and Chief Financial Officer	*
95	Mine Safety Disclosure	*
99.1	2000 Employee Stock Purchase Plan, as Amended and Restated Effective 5 November 2011	(22)
99.4	2002 Stock Incentive Plan	(2)

Exhibit No.	Description	Location
99.7	2003 Stock Incentive Plan	(1)
99.10	Amended and Restated Long Term Incentive Compensation Plan (Effective March 3, 2009)	(11)
99.11	Nominating and Corporate Governance Committee Charter, dated December 19, 2008	(10)
99.12	Audit Committee Charter, dated December 19, 2008	(10)
99.13	Compensation Committee Charter, dated 1 May 2015	(33)
99.17	Form of 2006 Executive Change in Control Agreement	(5)
99.17.1	Form of (first) Amendment to 2006 Executive Change in Control Agreement	(14)
99.17.2	Form of (second) Amendment to 2006 Executive Change in Control Agreement	(21)
99.18	Amended Deferred Compensation Plan	(7)
99.20	Stock Appreciation Right Agreement (November 2007)	(8)
99.21	Restricted Stock Award Agreement (November 2007)	(8)
99.22	2012 Executive Master Bonus Plan	(23)
99.23	Broad-Based Management Bonus Plan	(24)
99.24	Form of Common Stock Certificate	(9)
99.26	Form of Director Restricted Stock Unit Award Agreement (January 2009)	(10)
99.29	2010 Incentive Compensation Plan	(13)
99.29.1	Amendment No. 1 to 2010 Incentive Compensation Plan	(23)
99.34	Directors' Deferred Compensation Plan	(24)
99.35	Form of Performance Unit Award Agreement (November 2013)	(29)
99.36	Form of Notice of Stock Appreciation Right Grant (November 2015)	(34)
99.37	Form of Restricted Stock Award Grant Notice (November 2015)	(34)
101.INS	XBRL Instance Document	*
101.SCH	XBRL Taxonomy Extension Schema	*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase	*
101.DEF	XBRL Taxonomy Extension Definition Linkbase	*
101.LAB	XBRL Taxonomy Extension Label Linkbase	*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase	*

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\* Filed herewith.

Unless another exhibit number is indicated as the exhibit number for the exhibit as “originally filed,” the exhibit number in the filing in which any exhibit was originally filed and to which reference is made hereby is the same as the exhibit number assigned herein to the exhibit.

- (1) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2002.
- (2) Incorporated by reference to the indicated exhibit filed with Headwaters' Annual Report on Form 10-K, for the fiscal year ended September 30, 2004.

- (3) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2005.
- (4) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated March 1, 2005, filed March 3, 2005.
- (5) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended June 30, 2006.
- (6) Incorporated by reference to the indicated exhibit filed with Headwaters' Annual Report on Form 10-K, for the fiscal year ended September 30, 2006.
- (7) Incorporated by reference to the indicated exhibit filed with Headwaters' Annual Report on Form 10-K, for the fiscal year ended September 30, 2007.
- (8) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2007.
- (9) Incorporated by reference to the indicated exhibit filed with Headwaters' Annual Report on Form 10-K, for the fiscal year ended September 30, 2008.
- (10) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2008.
- (11) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2009.
- (12) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated December 19, 2008, filed December 22, 2008.
- (13) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2010.
- (14) Incorporated by reference to the indicated exhibit filed with Headwaters' Annual Report on Form 10-K, for the fiscal year ended September 30, 2010.
- (15) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated December 8, 2010, filed December 10, 2010.
- (16) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated December 10, 2010, filed December 14, 2010.
- (17) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated February 15, 2011, filed February 16, 2011.
- (18) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated February 24, 2011, filed February 25, 2011.
- (19) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K/A, for the event dated October 27, 2009, filed March 18, 2011.
- (20) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2011.
- (21) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated August 5, 2011, filed August 8, 2011.

- (22) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2011.
- (23) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated February 23, 2012, filed February 27, 2012.
- (24) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2012.
- (25) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated May 7, 2012, filed May 9, 2012.
- (26) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated December 14, 2012, filed December 17, 2012.
- (27) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated November 6, 2013, filed November 12, 2013.
- (28) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated December 9, 2013, filed December 12, 2013.
- (29) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2013.
- (30) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2014.
- (31) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated March 2, 2015, filed March 6, 2015.
- (32) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated March 24, 2015, filed March 24, 2015.
- (33) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended March 31, 2015.
- (34) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended December 31, 2015.
- (35) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated June 30, 2016, filed July 6, 2016.
- (36) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated August 1, 2016, filed August 2, 2016.
- (37) Incorporated by reference to the indicated exhibit filed with Headwaters' Quarterly Report on Form 10-Q, for the quarter ended June 30, 2016.
- (38) Incorporated by reference to the indicated exhibit filed with Headwaters' Current Report on Form 8-K, for the event dated August 19, 2016, filed August 25, 2016.

**(b) Exhibits**

The response to this portion of Item 15 is submitted as a separate section of this report. See Item 15 (a) 3 above.

**(c) Financial Statement Schedules**

The response to this portion of Item 15 is submitted as a separate section of this report. See Item 15 (a) 2 above.



## Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders  
Headwaters Incorporated  
South Jordan, Utah

We have audited the accompanying consolidated balance sheets of Headwaters Incorporated (“Company”) as of September 30, 2015 and 2016 and the related consolidated statements of income, changes in stockholders’ equity, and cash flows for each of the three years in the period ended September 30, 2016. These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Headwaters Incorporated at September 30, 2015 and 2016, and the consolidated results of its operations and its cash flows for each of the three years in the period ended September 30, 2016, in conformity with accounting principles generally accepted in the United States of America.

As discussed in note 2 to the consolidated financial statements in paragraph Recent Accounting Pronouncements, the Company changed its method of presentation of deferred income taxes in the consolidated balance sheet in 2016 due to the adoption of Financial Accounting Standards Board (“FASB”) Accounting Standards Update (“ASU”) 2015-17, *Balance Sheet Classification of Deferred Taxes* and the Company also changed its method of presentation of certain cash receipts and cash payments in the consolidated statements of cash flows in 2016 due to the adoption of FASB ASU 2016-15, *Classification of Certain Cash Receipts and Cash Payments*. These changes were applied retrospectively to all periods presented.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Headwaters Incorporated’s internal control over financial reporting as of September 30, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated November 15, 2016 expressed an unqualified opinion thereon.

/s/ BDO USA, LLP

Costa Mesa, California  
November 15, 2016

**HEADWATERS INCORPORATED**  
**CONSOLIDATED BALANCE SHEETS**

<i>(in thousands, except par value)</i>	<b>September 30,</b>	
	<b>2015</b>	<b>2016</b>
<b>ASSETS</b>		
<b>Current assets:</b>		
Cash and cash equivalents	\$ 142,597	\$ 65,298
Trade receivables, net	134,384	152,084
Inventories	55,074	72,668
Current income taxes	329	1,187
Other	11,827	13,517
<b>Total current assets</b>	<b>344,211</b>	<b>304,754</b>
<b>Property, plant and equipment, net</b>	<b>185,718</b>	<b>206,792</b>
<b>Other assets:</b>		
Goodwill	178,199	290,503
Intangible assets, net	143,718	319,162
Deferred income taxes	92,852	68,059
Other	34,321	49,173
<b>Total other assets</b>	<b>449,090</b>	<b>726,897</b>
<b>Total assets</b>	<b>\$ 979,019</b>	<b>\$ 1,238,443</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
<b>Current liabilities:</b>		
Accounts payable	\$ 25,306	\$ 30,211
Accrued personnel costs	52,544	45,366
Other accrued liabilities	51,781	63,785
Current portion of long-term debt	4,250	7,785
<b>Total current liabilities</b>	<b>133,881</b>	<b>147,147</b>
<b>Long-term liabilities:</b>		
Long-term debt, net	558,080	746,716
Other	36,776	41,230
<b>Total long-term liabilities</b>	<b>594,856</b>	<b>787,946</b>
<b>Total liabilities</b>	<b>728,737</b>	<b>935,093</b>
<b>Commitments and contingencies</b>		
<b>Redeemable non-controlling interest in consolidated subsidiary</b>	<b>12,431</b>	<b>13,363</b>
<b>Stockholders' equity:</b>		
Common stock, \$0.001 par value; authorized 200,000 shares; issued and outstanding: 73,896 shares at September 30, 2015 (including 83 shares held in treasury) and 74,153 shares at September 30, 2016 (including 105 shares held in treasury)	74	74
Capital in excess of par value	728,667	733,117
Retained earnings (accumulated deficit)	(489,889)	(441,793)
Treasury stock	(1,001)	(1,411)
<b>Total stockholders' equity</b>	<b>237,851</b>	<b>289,987</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 979,019</b>	<b>\$ 1,238,443</b>

See accompanying notes.

**HEADWATERS INCORPORATED**  
**CONSOLIDATED STATEMENTS OF INCOME**

<i>(in thousands, except per-share amounts)</i>	Year ended September 30,		
	2014	2015	2016
<b>Revenue:</b>			
Building products	\$ 472,434	\$ 523,643	\$ 594,281
Construction materials	309,337	352,263	370,439
Energy technology	9,676	19,427	10,087
<b>Total revenue</b>	<b>791,447</b>	<b>895,333</b>	<b>974,807</b>
<b>Cost of revenue:</b>			
Building products	336,283	367,163	423,910
Construction materials	224,888	249,077	258,478
Energy technology	4,583	9,202	4,218
<b>Total cost of revenue</b>	<b>565,754</b>	<b>625,442</b>	<b>686,606</b>
<b>Gross profit</b>	<b>225,693</b>	<b>269,891</b>	<b>288,201</b>
<b>Operating expenses:</b>			
Selling, general and administrative	137,650	149,623	156,898
Amortization	21,319	18,161	20,593
<b>Total operating expenses</b>	<b>158,969</b>	<b>167,784</b>	<b>177,491</b>
<b>Operating income</b>	<b>66,724</b>	<b>102,107</b>	<b>110,710</b>
<b>Other income (expense):</b>			
Net interest expense	(46,329)	(64,219)	(42,424)
Other, net	(348)	(218)	4,149
<b>Total other income (expense), net</b>	<b>(46,677)</b>	<b>(64,437)</b>	<b>(38,275)</b>
<b>Income from continuing operations before income taxes</b>	<b>20,047</b>	<b>37,670</b>	<b>72,435</b>
Income tax benefit (provision)	(3,574)	94,458	(22,756)
<b>Income from continuing operations</b>	<b>16,473</b>	<b>132,128</b>	<b>49,679</b>
Income (loss) from discontinued operations, net of income taxes	(415)	(460)	84
<b>Net income</b>	<b>16,058</b>	<b>131,668</b>	<b>49,763</b>
Net income attributable to non-controlling interest	(774)	(869)	(1,667)
<b>Net income attributable to Headwaters Incorporated</b>	<b>\$ 15,284</b>	<b>\$ 130,799</b>	<b>\$ 48,096</b>
<b>Basic income per share attributable to</b>			
<b>Headwaters Incorporated:</b>			
From continuing operations	\$ 0.21	\$ 1.79	\$ 0.65
From discontinued operations	(0.01)	(0.01)	0.00
	<b>\$ 0.20</b>	<b>\$ 1.78</b>	<b>\$ 0.65</b>
<b>Diluted income per share attributable to</b>			
<b>Headwaters Incorporated:</b>			
From continuing operations	\$ 0.21	\$ 1.74	\$ 0.64
From discontinued operations	(0.01)	(0.01)	0.00
	<b>\$ 0.20</b>	<b>\$ 1.73</b>	<b>\$ 0.64</b>

See accompanying notes.



## HEADWATERS INCORPORATED

### CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY

<i>(in thousands)</i>	Common stock		Capital in excess of par value	Retained earnings (accumulated deficit)	Treasury stock	Total stockholders' equity
	Shares	Amount				
<b>Balances as of September 30, 2013</b>	<b>73,149</b>	<b>\$ 73</b>	<b>\$ 720,828</b>	<b>\$ (635,972)</b>	<b>\$ (519)</b>	<b>\$ 84,410</b>
Issuance of common stock pursuant to employee stock purchase plan	78	1	758	—	—	759
Issuance of restricted stock, net of cancellations	150	0	—	—	—	0
Exercise of stock appreciation rights and restricted stock units	133	0	—	—	—	0
Stock-based compensation	—	—	2,165	—	—	2,165
Net 4 share decrease in treasury stock held for deferred compensation plan obligations, at cost	—	—	73	—	(73)	0
Adjustment of estimated redemption value of non-controlling interest in consolidated subsidiary	—	—	(176)	—	—	(176)
Net income attributable to Headwaters Incorporated for the year ended September 30, 2014	—	—	—	15,284	—	15,284
<b>Balances as of September 30, 2014</b>	<b>73,510</b>	<b>74</b>	<b>723,648</b>	<b>(620,688)</b>	<b>(592)</b>	<b>102,442</b>
Issuance of common stock pursuant to employee stock purchase plan	58	0	804	—	—	804
Issuance of restricted stock, net of cancellations	112	0	—	—	—	0
Exercise of stock appreciation rights	216	0	—	—	—	0
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	—	—	980	—	—	980
Stock-based compensation	—	—	2,826	—	—	2,826
Net 22 share increase in treasury stock held for deferred compensation plan obligations, at cost	—	—	409	—	(409)	0
Net income attributable to Headwaters Incorporated for the year ended September 30, 2015	—	—	—	130,799	—	130,799
<b>Balances as of September 30, 2015</b>	<b>73,896</b>	<b>74</b>	<b>728,667</b>	<b>(489,889)</b>	<b>(1,001)</b>	<b>237,851</b>
Issuance of common stock pursuant to employee stock purchase plan	55	0	873	—	—	873
Issuance of restricted stock, net of cancellations	90	0	—	—	—	0
Exercise of stock appreciation rights	112	0	—	—	—	0
Tax shortfall from exercise of stock appreciation rights and vesting of restricted stock	—	—	(14)	—	—	(14)
Stock-based compensation	—	—	3,181	—	—	3,181
Net 22 share increase in treasury stock held for deferred compensation plan obligations, at cost	—	—	410	—	(410)	0
Net income attributable to Headwaters Incorporated for the year ended September 30, 2016	—	—	—	48,096	—	48,096
<b>Balances as of September 30, 2016</b>	<b>74,153</b>	<b>\$ 74</b>	<b>\$ 733,117</b>	<b>\$ (441,793)</b>	<b>\$ (1,411)</b>	<b>\$ 289,987</b>

See accompanying notes.

**HEADWATERS INCORPORATED**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**

<i>(in thousands)</i>	Year ended September 30,		
	2014	2015	2016
<b>Cash flows from operating activities:</b>			
Net income	\$ 16,058	\$ 131,668	\$ 49,763
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	55,134	53,973	62,518
Interest expense related to amortization of debt issue costs and debt discount	2,175	6,180	3,973
Debt pre-payment premiums	—	18,320	5,395
Stock-based compensation	2,165	2,826	3,181
Deferred income taxes	1,666	(96,742)	22,779
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	—	(1,543)	(723)
Net loss (gain) on disposition of property, plant and equipment	95	49	(1,476)
Gain on acquired assets held for sale	—	—	(4,450)
Change in fair value of contingent consideration	—	—	(800)
Asset impairments	1,815	—	—
Net loss of unconsolidated joint ventures	529	262	43
Decrease (increase) in trade receivables	517	(14,194)	(1,102)
Increase in inventories	(2,347)	(1,007)	(432)
Decrease in accounts payable and accrued liabilities	(12,586)	(11,557)	(11,453)
Other changes in operating assets and liabilities, net	(178)	(6,527)	(6,913)
<b>Net cash provided by operating activities</b>	<b>65,043</b>	<b>81,708</b>	<b>120,303</b>
<b>Cash flows from investing activities:</b>			
Business acquisitions, net of cash acquired	(95,604)	(5,650)	(342,362)
Investments in unconsolidated joint ventures	(1,875)	(125)	—
Purchase of property, plant and equipment	(35,799)	(36,859)	(53,099)
Proceeds from disposition of property, plant and equipment	905	915	9,445
Proceeds from sale of acquired assets held for sale	—	—	6,200
Net decrease in long-term receivables and deposits	7,445	3,450	273
Net change in other assets	(1,556)	(597)	(1,843)
<b>Net cash used in investing activities</b>	<b>(126,484)</b>	<b>(38,866)</b>	<b>(381,386)</b>
<b>Cash flows from financing activities:</b>			
Net proceeds from issuance of long-term debt	146,650	414,675	343,453
Payments on long-term debt	(7,792)	(449,799)	(155,135)
Debt pre-payment premiums	—	(18,320)	(5,395)
Dividends paid to non-controlling interest in consolidated subsidiary	(950)	(1,690)	(735)
Employee stock purchases	759	804	873
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	—	1,543	723
<b>Net cash provided by (used in) financing activities</b>	<b>138,667</b>	<b>(52,787)</b>	<b>183,784</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>77,226</b>	<b>(9,945)</b>	<b>(77,299)</b>
Cash and cash equivalents, beginning of year	75,316	152,542	142,597
<b>Cash and cash equivalents, end of year</b>	<b>\$ 152,542</b>	<b>\$ 142,597</b>	<b>\$ 65,298</b>
<b>Supplemental non-cash investing and financing activities:</b>			
Increase in accrued liabilities for acquisition-related commitments	\$ 2,614	\$ —	\$ 12,000
Purchase of assets in exchange for future obligations	2,875	4,203	5,669
<b>Supplemental disclosure of cash flow information:</b>			
Cash paid for interest	\$ 42,572	\$ 58,681	\$ 39,312
Cash paid for income taxes	1,729	3,295	4,427

See accompanying notes.

# HEADWATERS INCORPORATED

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

September 30, 2016

### 1. Description of Business and Organization

Headwaters Incorporated (Headwaters) is a building materials company incorporated in Delaware, providing products and services in two core business segments.

The building products segment designs, manufactures, and sells a wide variety of building products, including exterior vinyl siding accessories (such as shutters, mounting blocks, and vents), manufactured architectural stone, roofing materials, concrete block and windows. Revenues from Headwaters' building products businesses are diversified geographically and also by end use, including new housing construction and residential repair and remodeling, as well as commercial construction.

The construction materials segment is the nationwide leader in the management and marketing of coal combustion products (CCPs), including fly ash, which is primarily sold directly to concrete manufacturers who use it as a mineral admixture for the partial replacement of portland cement in concrete, and synthetic gypsum. Headwaters' CCPs business is comprised of a nationwide supply, storage and distribution network. Headwaters also provides services to electric utilities related to the management of CCPs.

In addition to the two building materials segments described above, Headwaters also has a non-core energy technology segment which has been focused on reducing waste and increasing the value of energy-related feedstocks, primarily in the areas of low-value oil and coal. In oil, Headwaters' heavy oil upgrading process uses a liquid catalyst precursor to generate a highly active molecular catalyst to convert low-value residual oil into higher-value distillates that can be further refined into gasoline, diesel and other products. In coal, Headwaters owned and operated coal cleaning facilities that separate ash from waste coal to provide a refined coal product that is higher in Btu value and lower in impurities than the feedstock coal. As described in Note 13, Headwaters disposed of its remaining coal cleaning facilities in January 2013 and the results of Headwaters' coal cleaning operations have been presented as discontinued operations for all periods.

Headwaters' fiscal year ends on September 30 and unless otherwise noted, references to years refer to Headwaters' fiscal year rather than a calendar year.

### 2. Summary of Significant Accounting Policies

Principles of Consolidation — The consolidated financial statements include the accounts of Headwaters, all of its subsidiaries and other entities in which Headwaters has a controlling interest. In accordance with the requirements of Accounting Standards Codification (ASC) Topic 810 Consolidation, Headwaters is required to consolidate any variable interest entities for which it is the primary beneficiary. For investments in entities in which Headwaters has a significant influence over operating and financial decisions (generally defined as owning a voting or economic interest of 20% to 50%), Headwaters applies the equity method of accounting. In instances where Headwaters' investment is less than 20% and significant influence does not exist, investments are carried at cost. As of September 30, 2016, there are no material variable interest entities or equity-method investments. All significant intercompany transactions and accounts are eliminated in consolidation.

Use of Estimates — The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles (GAAP) requires management to make estimates and assumptions that affect i) the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and ii) the reported amounts of revenue and expenses during the reporting period. Actual results could differ materially from those estimates.

Segment Reporting, Major Customers and Other Concentrations of Risk — Headwaters currently operates three business segments: building products, construction materials and energy technology. Additional information about these segments is presented in Note 3. No customer accounted for over 10% of total revenue in any year presented and less than 10% of Headwaters' revenue was from sales outside the United States. Approximately 10%, 9% and 9% of

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Headwaters' total revenue and cost of revenue was for services in 2014, 2015 and 2016, respectively. Substantially all service-related revenue for all periods was in the construction materials segment. Headwaters normally purchases a majority of the polypropylene, poly vinyl chloride (PVC) and polyethylene used in its resin-based building products from a limited number of suppliers; however, these materials could be obtained from other suppliers if necessary and management currently believes any required change in suppliers would not be materially disruptive.

Revenue Recognition and Cost of Revenue — Revenue from the sale of building products, CCPs and energy-related products is recognized upon passage of title to the customer, which coincides with physical delivery and assumption of risk of loss by the customer. Estimated sales rebates and discounts pertaining to the sale of building products are provided for at the time of sale and are based primarily upon established policies and historical experience. Revenues include transportation charges and shipping and handling fees associated with delivering products and materials to customers when the transportation and/or shipping and handling is contractually provided for between the customer and Headwaters. Cost of revenue includes shipping and handling fees.

CCP service revenues are primarily earned under long-term contracts to dispose of residual materials created by coal-fired electric power generation. Generally, revenues under long-term site service contracts are recognized concurrently with the removal of material and are based on the volume of material removed at established prices per ton. Certain service revenue under these contracts is recognized on a time and materials basis in the period in which the services are performed. In compliance with contractual obligations, the cost of CCPs purchased from certain utilities is based on a percentage of the "net revenues" from sale of the CCPs purchased. Costs also include landfill fees and transportation charges to deliver non-marketable CCPs to landfills.

Cash and Cash Equivalents — Headwaters considers all short-term, highly-liquid investments with a maturity of three months or less when purchased to be cash equivalents. Certain cash and cash equivalents are deposited with financial institutions, and at times such amounts exceed insured depository limits.

Receivables — Allowances are provided for uncollectible accounts and notes when deemed necessary. Such allowances are based on an account-by-account analysis of collectability or impairment plus a provision for non-customer specific defaults based upon historical collection experience. Headwaters performs periodic credit evaluations of its customers but collateral is not required for trade receivables. Collateral is generally required for notes receivable, which were not material during the periods presented.

Inventories — Inventories are stated at the lower of cost or net realizable value. Cost includes direct material, transportation, direct labor and allocations of manufacturing overhead costs and is determined primarily using the first-in, first-out method. Excess and obsolete inventory reserves are based on historical experience and amounts expected to be realized for slow-moving and obsolete inventory.

Property, Plant and Equipment — Property, plant and equipment are recorded at cost. For significant self-constructed assets, cost includes direct labor and interest. Expenditures for major improvements are capitalized; expenditures for maintenance, repairs and minor improvements are charged to expense as incurred. Assets are depreciated using primarily the straight-line method over their estimated useful lives, limited to the lease terms for improvements to leased assets. The units-of-production method is used to depreciate certain building products segment assets. Upon the sale or retirement of property, plant and equipment, any gain or loss on disposition is reflected in results of operations and the related asset cost and accumulated depreciation are removed from the respective accounts.

Intangible Assets and Goodwill — Intangible assets consist primarily of identifiable intangible assets obtained in connection with acquisitions. With the exception of certain indefinite-lived trade names, intangible assets are amortized using the straight-line method, Headwaters' best estimate of the pattern of economic benefit, over their estimated useful lives. Goodwill consists of the excess of the purchase price for acquired businesses over the fair value of assets acquired, net of liabilities assumed. As described in more detail in Note 6, in accordance with ASC Topic 350 Intangibles—Goodwill and Other, goodwill and indefinite-lived intangible assets are not amortized, but are tested at least

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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annually for impairment. Amortizable intangible assets are tested for impairment only when an indicator of impairment exists.

Valuation of Long-Lived Assets — Headwaters evaluates the carrying value of long-lived assets, including amortizable intangible assets, as well as the related depreciation and amortization periods, to determine whether adjustments to carrying amounts or to estimated useful lives are required based on current events and circumstances. The carrying value of a long-lived asset is considered impaired when the anticipated cumulative undiscounted cash flow from that asset is less than its carrying value. In that event, a loss is recognized based on the amount by which the carrying value exceeds the fair value of the long-lived asset.

Debt Issue Costs and Debt Repayment Premiums — Debt issue costs represent direct costs incurred for the issuance of long-term debt and, except for costs related to the ABL Revolver (see Note 7), are reflected as a reduction of the carrying value of the respective long-term debt to which they relate. Debt issue costs related to the ABL Revolver are classified in other assets because the ABL Revolver has not been drawn since inception. Debt issue costs are amortized to interest expense over the terms of the respective debt using the effective interest method. When debt is repaid early, the portion of unamortized debt issue costs related to the early principal repayment is written off and included in interest expense. Any premiums associated with the repayment of debt are also charged to interest expense.

Financial Instruments — Derivatives are recorded in the consolidated balance sheet at fair value, as required by ASC Topic 815 Derivatives and Hedging. Accounting for changes in the fair value of a derivative depends on the intended use of the derivative, which is established at inception. For derivatives designated as cash flow hedges and which meet the effectiveness guidelines of ASC Topic 815, changes in fair value, to the extent effective, are recognized in other comprehensive income until the hedged item is recognized in earnings. Hedge effectiveness is measured at least quarterly based on the relative changes in fair value between the derivative contract and the hedged item over time. Any change in fair value of a derivative resulting from ineffectiveness, or an excluded component of the gain or loss, is recognized immediately and is recorded as interest expense.

Headwaters formally documents all hedge transactions at inception of the contract, including identification of the hedging instruments and the hedged items, as well as its risk management objectives and strategies for undertaking the hedge transaction. This process includes linking the derivatives that are designated as hedges to specific assets, liabilities, firm commitments or forecasted transactions. Headwaters also formally assesses the effectiveness of any hedging instruments on an ongoing basis. Historically, Headwaters has entered into hedge agreements primarily to limit its exposure for interest rate movements and certain commodity price fluctuations.

In connection with the issuance of certain convertible senior subordinated notes, Headwaters entered into convertible note hedge and warrant transactions for the purpose of effectively increasing the common stock conversion price. This convertible note hedge terminated when the notes were repaid in full in 2014. Since that time, and as of September 30, 2016, Headwaters has had no material hedge agreements or other derivatives in place.

Asset Retirement Obligations — From time to time Headwaters incurs asset retirement obligations associated with the restoration of certain CCP disposal sites. Headwaters records its legal obligations associated with the retirement of long-lived assets in accordance with the requirements of ASC Topic 410 Asset Retirements and Environmental Obligations. The fair value of a liability for an asset retirement obligation is recognized in the consolidated financial statements when the asset is placed in service. At such time, the fair value of the liability is estimated using discounted cash flows. In subsequent periods, the retirement obligation is accreted to its estimated future value as of the asset retirement date through charges to operating expenses. An asset equal in value to the retirement obligation is also recorded as a component of the carrying amount of the long-lived asset and is depreciated over the asset's useful life. As of September 30, 2015 and 2016, CCP asset retirement obligations totaled \$0. However, as described in Note 13, one of Headwaters' subsidiaries is performing permit reclamation responsibilities at a former coal cleaning facility site. As of September 30, 2015 and 2016, approximately \$7.4 million and \$9.3 million, respectively, was accrued for this reclamation liability.

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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Income Taxes — Headwaters files a consolidated federal income tax return with substantially all of its subsidiaries. Income taxes are determined on an entity-by-entity basis and are accounted for in accordance with ASC Topic 740 Income Taxes. Headwaters recognizes deferred tax assets or liabilities for the expected future tax consequences of events that have been recognized in the financial statements or in income tax returns. Deferred tax assets or liabilities are determined based upon the differences between the financial statement and tax bases of assets and liabilities using enacted tax rates expected to apply when the differences are expected to be settled or realized. Deferred income tax assets are periodically reviewed for recoverability based on current events, and valuation allowances are provided as necessary. Expenses for interest and penalties related to income taxes are classified within the income tax provision.

Advertising Costs — Advertising costs are expensed as incurred, except for the cost of certain materials which are capitalized and amortized to expense as the materials are distributed. Total advertising costs were approximately \$10.3 million, \$10.0 million and \$11.7 million in 2014, 2015 and 2016, respectively.

Warranty Costs — Provision is made for warranty costs at the time of sale, based upon established policies and historical experience.

Contingencies — In accounting for legal matters and other contingencies, Headwaters follows the guidance in ASC Topic 450 Contingencies, under which loss contingencies are accounted for based upon the likelihood of an impairment of an asset or the incurrence of a liability. If a loss contingency is “probable” and the amount of loss can be reasonably estimated, it is accrued. If a loss contingency is “probable” but the amount of loss cannot be reasonably estimated, disclosure is made. If a loss contingency is “reasonably possible,” disclosure is made, including the potential range of loss, if determinable. Loss contingencies that are “remote” are neither accounted for nor disclosed. Gain contingencies are given no accounting recognition until realized, but are disclosed if material. Headwaters records legal fees associated with loss contingencies when incurred and does not record estimated future legal fees.

Stock-Based Compensation — Headwaters uses the fair value method of accounting for stock-based compensation required by ASC Topic 718 Compensation—Stock Compensation. ASC Topic 718 requires companies to expense the value of equity-based awards. Stock-based compensation expense is reported within the same expense line items as used for cash compensation expense. Excess tax benefits resulting from exercise of stock options and stock appreciation rights (SARs) are reflected as necessary in the consolidated statement of changes in stockholders’ equity and in financing cash flows in the statement of cash flows.

Headwaters recognizes compensation expense equal to the grant-date fair value of stock-based awards for all awards expected to vest, over the period during which the related service is rendered by grantees. The fair value of stock-based awards is determined primarily using the Black-Scholes-Merton option pricing model (B-S-M model), adjusted where necessary to account for specific terms of awards that the B-S-M model does not have the capability to consider; for example, awards which have a cap on allowed appreciation. For such awards, the output determined by the B-S-M model has been reduced by an amount determined by a Quasi-Monte Carlo simulation to reflect the reduction in fair value associated with the appreciation cap or other award feature.

The B-S-M model was developed for use in estimating the fair value of traded options that have no vesting restrictions and that are fully transferable. Option valuation models require the input of certain subjective assumptions, including expected stock price volatility and expected term. For stock-based awards, Headwaters primarily uses the “graded vesting” or accelerated method to allocate compensation expense over the requisite service periods. Estimated forfeiture rates are based largely on historical data and were 1% during the periods presented, including as of September 30, 2016.

Earnings per Share Calculation — Earnings per share (EPS) has been computed based on the weighted-average number of common shares outstanding. Diluted EPS computations reflect the increase in weighted-average common shares outstanding that would result from the assumed exercise of outstanding stock-based awards calculated using the

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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treasury stock method, and the assumed conversion of convertible securities using the if-converted method, when such stock-based awards or convertible securities are dilutive.

In accordance with the requirements of ASC Topic 260 Earnings Per Share, the diluted EPS calculations consider all of the following as assumed proceeds in using the treasury stock method to calculate whether and to what extent options and SARs are dilutive: i) the amount employees must pay upon exercise; plus ii) the average amount of unrecognized compensation cost during the period attributed to future service; plus iii) the amount of tax benefits, if any, that would be credited to additional paid-in capital if the award were to be exercised.

Recent Accounting Pronouncements — In September 2015, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2015-16, Simplifying the Accounting for Measurement-Period Adjustments (ASC Topic 805, Business Combinations). This standard simplifies the accounting for adjustments made to provisional amounts recognized in a business combination so that revisions of previously reported information about the fair values of assets acquired and liabilities assumed need not be recognized retrospectively. Headwaters adopted this standard effective as of October 1, 2016. While there was no effect upon adoption, due to the acquisitions consummated in 2016, some of which have been provisionally accounted for as described in Note 4, the adoption of this standard could have a material effect on how changes to those provisional amounts are accounted for in future periods if adjusted.

In November 2015, the FASB issued ASU 2015-17, Balance Sheet Classification of Deferred Taxes (ASC Topic 740). This new rule was issued to simplify the presentation of deferred income taxes to require that all deferred income tax assets and liabilities be classified as noncurrent in the balance sheet. Early application of ASU 2015-17 is permitted and Headwaters elected to adopt the ASU effective as of December 31, 2015, with retrospective application to the September 30, 2015 balance sheet.

The effect of the adoption of ASU 2015-17 was to reclassify net deferred income tax assets of approximately \$23.4 million as of September 30, 2015 as noncurrent instead of current. Accordingly, total current assets in the September 30, 2015 balance sheet were reduced by that amount, and total other assets were increased by the same amount. There was no effect on total assets or on net income.

In August 2016, the FASB issued ASU 2016-15, Classification of Certain Cash Receipts and Cash Payments (ASC Topic 230, Statement of Cash Flows), which addresses the appropriate classification of certain cash flows as operating, investing, or financing. Among other things, ASU 2016-15 addresses classification of debt prepayment or extinguishment costs and contingent consideration payments made following a business combination. Headwaters adopted ASU 2016-15 effective as of September 30, 2016 which required retrospective application for all prior periods presented. The effect of early adoption of ASU 2016-15 was to increase cash flows from operating activities and decrease cash flows from financing activities by approximately \$18.3 million in 2015 and by \$5.4 million in 2016.

In May 2014, the FASB issued ASU 2014-09, Revenue from Contracts with Customers (ASC Topic 606). This new revenue standard creates a single source of revenue guidance for all companies in all industries and is more principles-based than current revenue guidance. In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, which deferred the effective date of ASU 2014-09. The mandatory adoption date of ASC 606 for Headwaters is now October 1, 2018. There are two methods of adoption allowed, either a “full” retrospective adoption or a “modified” retrospective adoption. Headwaters currently believes the impact of adopting ASC 606 will not be material to either past or future periods as it relates to the building products and energy technology segments, but is still evaluating the potential impact the new standard will have on the construction materials segment. Adoption of the new standard could require expanded disclosures.

In February 2016, the FASB issued ASU 2016-02, Leases (ASC Topic 842). This new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the Statement of Income. The mandatory adoption date of ASC 842 for Headwaters is October 1, 2019. A modified retrospective transition approach is required for leases existing at, or entered

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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into, after the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. Headwaters currently expects that upon adoption of ASC 842, ROU assets and lease liabilities will be recognized in the balance sheet in amounts that will be material.

In March 2016, the FASB issued ASU 2016-09, Improvements to Employee Share-Based Payment Accounting (ASC Topic 718, Compensation—Stock Compensation), which changes how companies account for certain aspects of share-based payments to employees. Among other things, the new rules eliminate the requirement to record excess tax benefits in additional paid-in capital and instead require all such tax benefits to be recorded in the income statement. Most of the amendments are mandatory while one, how to account for forfeitures, requires a policy election. Different methods of adoption are required for the various amendments and early adoption is permitted, but all of the amendments must be adopted in the same period. The adoption date for Headwaters can be no later than October 1, 2017, which is when Headwaters currently expects to adopt the new rules. Headwaters continues to evaluate ASU 2016-09 and at the current time does not know what effects adoption of the new standard will have on its financial statements and whether the impact will be material.

In October 2016, the FASB issued ASU 2016-16, Intra-Entity Transfers of Assets Other Than Inventory (ASC Topic 740, Income Taxes), which will require an entity to recognize the income tax consequences of an intra-entity transfer of an asset, other than inventory, when the transfer occurs. This ASU is effective for Headwaters on October 1, 2018 with early adoption permitted. Headwaters has not yet evaluated the effect, if any, that ASU 2016-16 will have on its financial statements.

Headwaters has reviewed other recently issued accounting standards which have not yet been adopted in order to determine their potential effect, if any, on the results of operations or financial position of Headwaters. Based on the review of these other recently issued standards, Headwaters does not currently believe that any of those accounting pronouncements will have a significant effect on its current or future financial position, results of operations, cash flows or disclosures.

Reclassifications — Certain prior period amounts, including the changes described above for the adoption of new accounting standards, have been reclassified to conform to the current period's presentation. The reclassifications had no effect on net income, but did affect total assets and total liabilities as well as the classification of certain cash flows in the consolidated statements of cash flows.

### 3. Segment Reporting

Headwaters currently operates three business segments: building products, construction materials and energy technology. These segments are managed and evaluated separately by management due to differences in their operations, products and services. Revenues for the building products segment consist of product sales to wholesale and retail distributors, contractors and other users of building products. Revenues for the construction materials segment consist primarily of CCP sales to ready-mix concrete businesses, with a smaller amount from services provided to coal-fueled electric generating utilities. Continuing revenues for the energy technology segment consist primarily of catalyst sales to oil refineries. As described in Note 13, Headwaters sold all of its coal cleaning facilities in 2012 and 2013 and the results of operations have been reflected as discontinued operations in the accompanying statements of income for all periods. Intersegment sales are immaterial.

Historically, and for all years presented, the block product business has been a part of the building products segment. However, commencing in the December 2016 quarter, the construction materials segment will include the block product business. This change is being made because of changes in management and operations, all of which became operative effective as of October 1, 2016.

The following segment information has been prepared in accordance with ASC Topic 280 Segment Reporting. Segment performance is evaluated primarily on revenue and operating income, although other factors are also used, such as Adjusted EBITDA, a non-GAAP financial measure. Headwaters defines Adjusted EBITDA as net income plus net



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**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**September 30, 2016**

interest expense, income taxes, depreciation and amortization, stock-based compensation, cash-based compensation tied to stock price, goodwill and other impairments, and other non-routine adjustments that arise from time to time.

Segment costs and expenses considered in deriving segment operating income include cost of revenue, amortization, and segment-specific selling, general and administrative expenses. Amounts included in the Corporate column represent expenses that are not allocated to any segment and include administrative departmental costs and general corporate overhead. Segment assets reflect those specifically attributable to individual segments and primarily include cash, accounts receivable, inventories, property, plant and equipment, goodwill and intangible assets. Certain other assets are included in the Corporate column. The net operating results of the discontinued coal cleaning business are reflected in the single line item for discontinued operations.

<i>(in thousands)</i>	2014				Totals
	Building products	Construction materials	Energy technology	Corporate	
Segment revenue	\$ 472,434	\$ 309,337	\$ 9,676	\$ 0	\$ 791,447
Depreciation and amortization	\$ (39,425)	\$ (13,706)	\$ (1,731)	\$ (272)	\$ (55,134)
Operating income (loss)	\$ 46,888	\$ 51,503	\$ (6,829)	\$ (24,838)	\$ 66,724
Net interest expense					(46,329)
Other income (expense), net					(348)
Income tax provision					(3,574)
Income from continuing operations					16,473
Loss from discontinued operations, net of income taxes					(415)
Net income					\$ 16,058
Capital expenditures	\$ 25,307	\$ 5,721	\$ 473	\$ 4,298	\$ 35,799
Segment assets	\$ 411,968	\$ 325,140	\$ 22,674	\$ 136,524	\$ 896,306

<i>(in thousands)</i>	2015				Totals
	Building products	Construction materials	Energy technology	Corporate	
Segment revenue	\$ 523,643	\$ 352,263	\$ 19,427	\$ 0	\$ 895,333
Depreciation and amortization	\$ (36,933)	\$ (15,155)	\$ (1,372)	\$ (513)	\$ (53,973)
Operating income (loss)	\$ 64,418	\$ 64,984	\$ 731	\$ (28,026)	\$ 102,107
Net interest expense					(64,219)
Other income (expense), net					(218)
Income tax benefit					94,458
Income from continuing operations					132,128
Loss from discontinued operations, net of income taxes					(460)
Net income					\$ 131,668
Capital expenditures	\$ 25,454	\$ 5,855	\$ 325	\$ 5,225	\$ 36,859
Segment assets	\$ 412,867	\$ 294,057	\$ 45,671	\$ 226,424	\$ 979,019

**HEADWATERS INCORPORATED**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**September 30, 2016**

<i>(in thousands)</i>	2016				Totals
	Building products	Construction materials	Energy technology	Corporate	
Segment revenue	\$ 594,281	\$ 370,439	\$ 10,087	\$ 0	\$ 974,807
Depreciation and amortization	\$ (43,058)	\$ (16,717)	\$ (1,239)	\$ (1,504)	\$ (62,518)
Operating income (loss)	\$ 65,365	\$ 76,099	\$ (2,514)	\$ (28,240)	\$ 110,710
Net interest expense					(42,424)
Other income (expense), net					4,149
Income tax provision					(22,756)
Income from continuing operations					49,679
Income from discontinued operations, net of income taxes					84
Net income					\$ 49,763
Capital expenditures	\$ 38,569	\$ 7,159	\$ 14	\$ 7,357	\$ 53,099
Segment assets	\$ 729,014	\$ 332,593	\$ 43,412	\$ 133,424	\$ 1,238,443

**4. Acquisitions**

Entegra — On December 12, 2013, Headwaters acquired 80% of the equity interests of Roof Tile Acquisition, LLC, a privately-held Florida-based company in the building products industry, which sells its products primarily under the Entegra brand. Entegra's results of operations have been included with Headwaters' consolidated results beginning December 13, 2013.

Entegra is a leading manufacturer of concrete roof tiles and accessories which are sold primarily in Florida. The acquisition of Entegra provides additional product offerings to Headwaters' current roofing products portfolio. Headwaters believes the strategic location of Entegra's centralized manufacturing plant in Florida, the quality of its contractor/customer relationships, and the scope of its products and services provide a competitive advantage. Marketing to Entegra customers provides Headwaters the opportunity to expand existing sales and distribution within Florida, which is one of the fastest growing states in the U.S. in terms of population.

Total consideration paid for Entegra was approximately \$57.5 million, all of which was cash. Direct acquisition costs, consisting primarily of fees for legal services, totaled approximately \$0.4 million and were included in selling, general and administrative expense in the statement of income for fiscal 2014. Headwaters has the right, but not the obligation, to acquire the non-controlling 20% equity interest in Entegra for a stipulated multiple of EBITDA adjusted for certain prescribed items. This call right is exercisable at any time after five years following the date of acquisition, unless certain defined events occur prior to that time, in which case the right is exercisable earlier. The non-controlling owners have the right, but not the obligation, to require Headwaters to acquire the non-controlling 20% equity interest, again for a stipulated multiple of EBITDA adjusted for certain prescribed items. This put right became exercisable in June 2015.

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The Entegra acquisition has been accounted for as a business combination in accordance with the requirements of ASC 805 Business Combinations. The following table sets forth the estimated fair values of assets acquired and liabilities assumed as of the acquisition date:

	<u>(in thousands)</u>
Current assets	\$ 8,261
Current liabilities	(3,422)
Property, plant and equipment	10,589
Intangible assets:	
Customer relationships (15 year life)	20,600
Trade name (indefinite life)	6,600
Goodwill	28,156
<b>Net assets acquired</b>	<b>70,784</b>
Less redeemable non-controlling interest	(13,252)
<b>Net assets attributable to Headwaters</b>	<b>\$ 57,532</b>

Entegra's future growth attributable to new customers, geographic presence and assembled workforce are additional assets that are not separable and which contributed to recorded goodwill, most of which is tax deductible over 15 years.

Gerard — On May 16, 2014, Headwaters acquired certain assets and assumed certain liabilities of the roofing products business of Metals USA Building Products, L.P., which products are sold under the Gerard and Allmet brands. Gerard's results of operations are being reported within the building products segment and have been included with Headwaters' consolidated results beginning May 16, 2014.

Gerard is one of the largest manufacturers of stone coated metal roofing materials in the U.S. and sells niche roofing products that combine profiles resembling tile, shake, or slate with a fire proof material and a low lifetime installed cost. The acquisition of Gerard increases the number of specialty niche roofing products that Headwaters provides to its core customers and is an area of focus for Headwaters. With the addition of Gerard, Headwaters now has three product categories in niche roofing, including resin-based composite, concrete, and metal, which could increase opportunities for cross selling. Besides broadening the niche roofing product lines, Gerard also expands Headwaters geographic footprint in the roofing category.

Total consideration paid for Gerard was approximately \$27.6 million, all of which was cash. Direct acquisition costs, consisting primarily of fees for legal services, totaled approximately \$0.3 million and were included in selling, general and administrative expense in the statement of income for fiscal 2014.

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

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The Gerard acquisition has been accounted for as a business combination in accordance with the requirements of ASC 805 Business Combinations. The following table sets forth the estimated fair values of assets acquired and liabilities assumed as of the acquisition date:

	(in thousands)
Current assets	\$ 9,236
Current liabilities	(1,691)
Property, plant and equipment	8,314
Intangible assets:	
Customer relationships (15 year life)	4,000
Trade name (indefinite life)	3,900
Goodwill	7,719
Long-term liabilities	(3,906)
<b>Net assets acquired</b>	<b>\$ 27,572</b>

Gerard's future growth attributable to new customers, geographic presence and assembled workforce are additional assets that are not separable and which contributed to recorded goodwill, most of which is tax deductible over 15 years.

Roofing Businesses Acquired in 2016 – On November 13, 2015, Headwaters acquired 100% of the equity interests in several related companies, together which comprise a stone-coated metal roofing business located in California known as Metro Roof Products. On December 3, 2015, Headwaters acquired certain assets and assumed certain liabilities of Enviroshake Inc., a Canadian company that manufactured composite roofing products, primarily in the U.S. and Canada. These acquisitions are expected to expand Headwaters' presence in the niche roofing products sector.

Combined consideration paid for the two roofing acquisitions, net of cash acquired, was approximately \$57.0 million. Direct acquisition costs were not material. Results of operations are being reported within the building products segment and have been included with Headwaters' consolidated results beginning November 13, 2015 and December 3, 2015, respectively.

Metro sells stone-coated metal roofing products in the U.S., with an aesthetic resemblance to tile, shake, slate, or asphalt, but which offer the strength and durability of steel. Metro sells to both distributors and contractors. Enviroshake is a composite roofing product that replicates the look of cedar shake, cedar shingle and slate and uses a direct distribution model to market and sell its products to customers. The acquisitions of Metro and Enviroshake increase the number of specialty niche roofing products that Headwaters provides to its core customers and is an area of continuing focus for Headwaters.

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The roofing acquisitions have been accounted for as business combinations in accordance with the requirements of ASC 805 Business Combinations. The following table sets forth the combined estimated fair values of assets acquired and liabilities assumed for the acquisitions as of the acquisition dates, using available information and assumptions Headwaters deems to be reasonable at the current time. Headwaters is in the process of finalizing all of the estimated amounts shown below, including the third-party valuations of the fair values of the acquired intangible assets; therefore, the provisional measurements shown in the table are subject to change:

	<u>(in thousands)</u>
Current assets	\$ 7,402
Current liabilities	(1,455)
Property, plant and equipment	3,138
Intangible assets:	
Customer relationships (12 year life)	8,040
Trade names (indefinite life)	5,565
Intellectual property (15 year life)	10,102
Goodwill	27,218
Long-term liabilities	(3,015)
<b>Net assets acquired</b>	<b><u>\$ 56,995</u></b>

The process of identifying and valuing the intangible assets that were acquired has not been completed. When those intangible assets have been identified and valued, and estimated useful lives are determined, amortization of the intangible assets will be adjusted effective as of the acquisition dates. Future growth attributable to such things as new customers, geographic presence and assembled workforce are additional assets that are not separable and which contributed to recorded goodwill, most of which is expected to be tax deductible over a 15-year period.

Synthetic Materials – On March 17, 2016, Headwaters acquired 100% of the equity interests in a synthetic gypsum processing and marketing business known as Synthetic Materials, LLC (SynMat), with operations in several locations in the Eastern U.S. This acquisition is expected to expand Headwaters' presence in the CCP industry.

Consideration paid on the date of acquisition, net of cash acquired, was approximately \$33.2 million. In addition to the net cash paid as of the acquisition date, approximately \$12.0 million of liabilities have been recorded for future estimated payments, all of which are expected to be made within 12 months from the acquisition date. Direct acquisition costs were not material. Results of operations are being reported within the construction materials segment and have been included with Headwaters' consolidated results beginning March 17, 2016.

Synthetic gypsum is used as a substitute for mined gypsum with application in the manufacture of wallboard and cement and as an agricultural soil amendment, among other uses. SynMat is a leading processor of synthetic gypsum and Headwaters expects marketing and operational synergies in the combination of Headwaters' current CCP operations with those of SynMat.

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### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The SynMat acquisition has been accounted for as a business combination in accordance with the requirements of ASC 805 Business Combinations. The following table sets forth the estimated fair values of assets acquired and liabilities assumed as of the acquisition date, using available information and assumptions Headwaters deems to be reasonable at the current time. Headwaters is in the process of finalizing all of the estimated amounts shown below, including the third-party valuations of the fair values of the acquired intangible assets; therefore, the provisional measurements shown in the table are subject to change:

	<u>(in thousands)</u>
Current assets	\$ 3,965
Current liabilities	(1,491)
Property, plant and equipment	3,710
Intangible assets:	
Contracts (20-year life)	15,220
Customer relationships (15 year life)	2,560
Trade names (indefinite life)	4,790
Goodwill	4,414
<b>Net assets acquired</b>	<b><u>\$ 33,168</u></b>

The process of identifying and valuing the intangible assets that were acquired has not been completed. When those intangible assets have been identified and valued, and estimated useful lives are determined, amortization of the intangible assets will be adjusted effective as of the acquisition date. Future growth attributable to such things as new customers, geographic presence and assembled workforce are additional assets that are not separable and which contributed to recorded goodwill, all of which is expected to be tax deductible over a 15-year period.

**Krestmark** — On August 19, 2016, Headwaters acquired substantially all of the assets and assumed certain liabilities of Krestmark Industries, L.P. Krestmark is a Texas-based business that manufactures and sells high quality vinyl windows in the U.S. Krestmark's branded window products are sold to a diverse customer base of homebuilders, lumber yards, and distributors. This acquisition is a natural extension of Headwaters' focus on supplying customers and homeowners with attractive products for the exterior of the home. Krestmark's results of operations are being reported within the building products segment and have been included with Headwaters' consolidated results beginning August 20, 2016.

Total consideration paid on the date of acquisition, was \$240.0 million, which is subject to adjustment for the final calculation of acquisition-date working capital. The working capital adjustment is currently expected to be finalized in the December 2016 quarter. Approximately \$4.6 million of the initial consideration paid represents prepaid compensation for certain Krestmark employees with retention bonus obligations over periods of up to two years from the acquisition date. This amount has been recorded as prepaid compensation in the consolidated balance sheet and is being amortized to expense over the two-year retention period. Direct acquisition costs were not material.

The Krestmark acquisition has been accounted for as a business combination in accordance with the requirements of ASC 805 Business Combinations. The following table sets forth the estimated fair values of assets acquired and liabilities assumed as of the acquisition date, using available information and assumptions Headwaters deems to be reasonable at the current time. Headwaters is in the process of finalizing all of the estimated amounts shown below, including the third-party valuations of the fair values of the acquired intangible assets; therefore, the provisional

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

measurements shown in the table are subject to change. The table does not include any amounts for the prepaid compensation described above.

	<b>(in thousands)</b>
Current assets	\$ 20,731
Current liabilities	(3,884)
Property, plant and equipment	5,597
Intangible assets:	
Customer relationships (20 year life)	107,500
Trade name (indefinite life)	36,600
Non-competition agreements (7 year life)	2,350
Goodwill	66,539
<b>Net assets acquired</b>	<b>\$ 235,433</b>

The process of identifying and valuing the intangible assets that were acquired is in the early stages and has not been completed. When those intangible assets have been identified and valued, and estimated useful lives are determined, amortization of the intangible assets will be adjusted effective as of the acquisition date. Future growth attributable to such things as new customers, geographic presence and assembled workforce are additional assets that are not separable and which contributed to recorded goodwill, substantially all of which is expected to be tax deductible over a 15-year period.

Other — During the March 2014 quarter, Headwaters acquired the assets of a company in the construction materials industry located in the Northeast U.S. for initial cash consideration of approximately \$3.1 million. This acquisition increased Headwaters' supply of fly ash and bottom ash, improving its competitive position in that region. During the September 2014 quarter, Headwaters acquired the assets of another company in the construction materials industry located in the Southeast U.S. for cash consideration of approximately \$7.4 million. This acquisition increased Headwaters' supply of CCPs produced by industrial boilers and has strengthened the ability to meet customers' needs along the Gulf Coast. During the September 2015 quarter, Headwaters acquired the assets of a company in the building products industry located in Texas for initial cash consideration of approximately \$4.5 million. This acquisition strengthens Headwaters' ability to market its block products in the central Texas region.

During the March 2016 quarter, Headwaters acquired certain decking manufacturing assets for cash consideration of approximately \$6.3 million. The assets have been relocated to one of Headwaters' current manufacturing sites. This acquisition provides an opportunity to expand distribution to existing customers, develop additional decking related products, and increase Headwaters' product and manufacturing expertise. During the June 2016 quarter, Headwaters' minority-owned subsidiary acquired for initial cash consideration of \$10.4 million all of the equity interests in several related companies, together which comprise a concrete roof tile business which had operations primarily in Florida. This acquisition is expected to expand Headwaters' presence in that niche roofing sector in Florida. Certain assets acquired in this acquisition are being held for sale and while provisional estimated values have been ascribed to those assets, at the current time there is significant uncertainty regarding the fair values of the assets. Accordingly, those provisional values could change in the future when final determinations of fair value for purchase accounting purposes have been completed. Gains on assets held for sale of approximately \$4.5 million, net of \$2.0 million of income taxes, have been recognized in other income in Headwaters' consolidated statement of income for 2016 and it is currently expected that additional gains could be realized in future periods as future sales transactions are consummated.

Investments in entities in which Headwaters has a significant influence over operating and financial decisions are accounted for using the equity method of accounting. Headwaters acquired 100% of one such equity method investee in the December 2014 quarter for a cash payment of approximately \$1.2 million. As a result of Headwaters obtaining a controlling financial interest, the investee has been consolidated within the building products segment.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Headwaters' goodwill from all acquisitions plus all indefinite-lived trade names are tested for impairment annually. In addition, all acquired goodwill and intangible assets are subject to review for impairment if indicators of potential impairment develop in the future.

Combined Financial Information — The actual revenue included in Headwaters' consolidated statements of income for 2014, 2015 and 2016 from the acquisitions that occurred in each fiscal year was approximately \$47.6 million, \$3.2 million and \$49.3 million, respectively, and the actual earnings (loss) (including non-controlling interest) included in Headwaters' consolidated statements of income for 2014, 2015 and 2016 was approximately \$5.2 million, \$(1.2) million and \$4.7 million, respectively. The following unaudited information presents the pro forma consolidated revenue and net income for Headwaters for the years indicated as if the 2014 acquisitions had been included in Headwaters' consolidated results of operations beginning October 1, 2012, the 2015 acquisitions had been included in Headwaters' consolidated results of operations beginning October 1, 2013 and the 2016 acquisitions had been included in Headwaters' consolidated results of operations beginning October 1, 2014.

<i>Unaudited (in thousands)</i>	2014	2015	2016
Pro forma revenue	\$ 835,864	\$ 1,061,072	\$ 1,096,658
Pro forma net income	\$ 20,409	\$ 145,291	\$ 65,049

The above unaudited pro forma results have been calculated by combining the historical results of Headwaters and the acquired businesses as if all acquisitions had occurred as of October 1 of the fiscal year prior to the respective acquisition dates, and then adjusting the income tax provisions as if they had been calculated on the resulting, combined results. The pro forma results include estimates for intangible asset amortization for the 2015 acquisitions which are subject to change when the final asset values have been determined.

The pro forma results reflect elimination of the following 2014 expenses (since for purposes of the pro forma presentation they would be reflected in 2013 instead of in 2014): \$0.7 million of direct acquisition costs and \$1.2 million of nonrecurring expense related to the fair value adjustments to acquisition-date inventories. There were no material 2015 expenses reflected in 2014 instead of in 2015. The pro forma results reflect the following 2016 expenses in 2015 instead of 2016: \$0.9 million of direct acquisition costs and \$1.1 million of nonrecurring expense related to the fair value adjustment to acquisition-date inventory. For all periods presented, historical depreciation and amortization expense of the acquired companies was adjusted to reflect the acquisition date fair value amounts of the related assets. No other material pro forma adjustments were deemed necessary, either to conform the acquisitions to Headwaters' accounting policies or for any other situation. The pro forma information is not necessarily indicative of the results that would have been achieved had the transactions occurred on the dates indicated or that may be achieved in the future.

Non-controlling Interest in Consolidated Subsidiary — As described above, Headwaters acquired 80% of the equity interests of Entegra, and the non-controlling owners have the right to require Headwaters to acquire the non-controlling 20% equity interest. This put right is not deemed to be a freestanding financial instrument and because it is not solely within the control of Headwaters, the non-controlling interest does not qualify as permanent equity and has been reported outside the stockholders' equity section of the balance sheet as temporary, or mezzanine, equity. The value of the non-controlling interest was affected by the lack of control as well as the estimated fair values of the put and call rights.



## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Because there is no fixed redemption date for the put right, Headwaters compares quarterly the carrying value of the non-controlling interest to its estimated redemption value. The estimated redemption value is calculated based on the EBITDA formula described previously to determine the price that would be paid if the put right were to have been exercised at the end of the reporting period. If applicable, the carrying amount is increased, but not decreased, to the estimated redemption value. The following table summarizes the activity of the non-controlling interest during the three-year period ended September 30, 2016:

	<u>(in thousands)</u>
Estimated fair value as of acquisition date	\$ 13,252
Net income attributable to non-controlling interest	774
Dividends paid to non-controlling interest	(950)
Adjustment of estimated redemption value	176
<b>Balance as of September 30, 2014</b>	<b>13,252</b>
Net income attributable to non-controlling interest	869
Dividends paid to non-controlling interest	(1,690)
<b>Balance as of September 30, 2015</b>	<b>12,431</b>
Net income attributable to non-controlling interest	1,667
Dividends paid to non-controlling interest	(735)
<b>Balance as of September 30, 2016</b>	<b>\$ 13,363</b>

#### 5. Current Assets and Current Liabilities

Receivables — Activity in the trade receivables allowance account was as follows for the three-year period ended September 30, 2016:

<u>(in thousands)</u>	<u>Balance at beginning of year</u>	<u>Charged to expense</u>	<u>Accounts written off</u>	<u>Balance at end of year</u>
2014	\$ 2,777	\$ 2,022	\$ (1,261)	\$ 3,538
2015	3,538	1,424	(1,152)	3,810
2016	3,810	1,552	(1,199)	4,163

Inventories — Inventories consisted of the following at September 30:

<u>(in thousands)</u>	<u>2015</u>	<u>2016</u>
Raw materials	\$ 12,831	\$ 22,333
Finished goods	42,243	50,335
	<b>\$ 55,074</b>	<b>\$ 72,668</b>

Approximately \$16.5 million of the increase in inventories in 2016 was a result of the acquisitions described in Note 4.

**HEADWATERS INCORPORATED**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**September 30, 2016**

Warranty Liabilities — Activity in the warranty liability account was as follows for the three-year period ended September 30, 2016:

<i>(in thousands)</i>	Balance at beginning of year	Charged to expense	Changes in prior year estimates	Additions From acquisitions	Payments for claims	Balance at end of year
2014	\$ 2,141	\$ 1,992	\$ 32	\$ 4,842	\$ (1,788)	\$ 7,219
2015	7,219	2,020	(461)	—	(2,010)	6,768
2016	6,768	1,393	(265)	3,093	(1,651)	9,338

Other Accrued Liabilities — Other accrued liabilities consisted of the following at September 30:

<i>(in thousands)</i>	2015	2016
Products and services received but not yet invoiced	\$ 24,215	\$ 25,609
Acquisition liabilities	400	12,400
Other	27,166	25,776
	<u>\$ 51,781</u>	<u>\$ 63,785</u>

**6. Long-Lived Assets**

Property, Plant and Equipment — Property, plant and equipment consisted of the following at September 30:

<i>(in thousands of dollars)</i>	Estimated useful lives	2015	2016
Land and improvements	15 - 40 years	\$ 15,904	\$ 12,380
Buildings and improvements	5 - 40 years	69,645	70,724
Equipment and vehicles	3 - 20 years	239,759	267,893
Dies and molds	3 - 20 years	85,880	86,941
Construction in progress	—	18,271	25,749
		429,459	463,687
Less accumulated depreciation		(243,741)	(256,895)
<b>Net property, plant and equipment</b>		<u>\$ 185,718</u>	<u>\$ 206,792</u>

Depreciation expense was approximately \$33.8 million, \$35.8 million and \$41.9 million in 2014, 2015 and 2016, respectively.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Intangible Assets — Headwaters' identified intangible assets are being amortized over the estimated useful lives shown in the table below. The table also summarizes the gross carrying amounts and related accumulated amortization of intangible assets as of September 30:

(in thousands of dollars)	Estimated useful lives	2015		2016	
		Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Trade names	Indefinite	\$ 15,300	\$ —	\$ 63,245	\$ —
Intellectual property	15 years	—	—	10,102	—
Contracts	15 - 20 years	112,300	69,875	127,520	76,029
Customer relationships	5 - 20 years	109,078	57,844	227,909	67,493
Trade names	20 years	66,960	36,554	66,755	39,744
Patents and patented technologies	6 - 19 years	14,526	12,574	5,401	2,875
Other	5 - 17 years	4,585	2,184	7,035	2,664
		<b>\$ 322,749</b>	<b>\$ 179,031</b>	<b>\$ 507,967</b>	<b>\$ 188,805</b>

The above table includes provisional amounts for certain intangible assets acquired in 2016 because the process of identifying and valuing those assets has not been completed. Total amortization expense related to intangible assets was approximately \$21.3 million, \$18.2 million and \$20.6 million in 2014, 2015 and 2016, respectively. The primary reason for the decrease in amortization expense from 2014 to 2015 is that certain assets have been fully amortized. Total estimated annual amortization expense for 2017 through 2021 is shown in the following table:

Year ending September 30:	(in thousands)
2017	\$ 25,047
2018	25,002
2019	23,980
2020	19,898
2021	19,868

Goodwill — Changes in the carrying amount of goodwill, by segment, are as follows for the two-year period ended September 30, 2016:

(in thousands)	Building products	Construction materials	Total
<b>Balances as of September 30, 2014</b>	<b>\$ 56,687</b>	<b>\$ 118,899</b>	<b>\$ 175,586</b>
Goodwill related to 2015 acquisitions	2,687	—	2,687
Adjustments to previously recorded amounts for 2014 acquisitions	390	(464)	(74)
<b>Balances as of September 30, 2015</b>	<b>59,764</b>	<b>118,435</b>	<b>178,199</b>
Goodwill related to 2016 acquisitions	97,331	16,406	113,737
Adjustments to previously recorded amounts for 2015 acquisitions	(1,433)	—	(1,433)
<b>Balances as of September 30, 2016</b>	<b>\$ 155,662</b>	<b>\$ 134,841</b>	<b>\$ 290,503</b>

Impairment Testing — In accordance with the requirements of ASC Topic 350 Intangibles—Goodwill and Other, Headwaters does not amortize goodwill or indefinite-lived intangible assets, all of which relate to acquisitions. However, Headwaters is required to periodically test these assets for impairment at least annually, or sooner if indicators of possible impairment arise. Headwaters performs its annual impairment testing during the fourth quarter of its fiscal year using a June 30 test date and a one- to three-step process. Headwaters' reporting units for purposes of impairment testing are the same as its operating segments.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Headwaters evaluates qualitative factors, including macroeconomic conditions, industry and market considerations, overall financial performance and cost factors, to determine whether it is necessary to perform step 1 of the two-step impairment test. This qualitative evaluation is commonly referred to as “step 0.” After assessing the appropriate qualitative factors, only if it is determined that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, is it necessary to perform step 1.

Step 1 of impairment testing consists of determining and comparing the fair value of a reporting unit, calculated primarily using discounted expected future cash flows, to the carrying value of the reporting unit. If step 1 is failed for a reporting unit, indicating a potential impairment, Headwaters is required to complete step 2, which is a more detailed test to calculate the implied fair value of goodwill and indefinite-lived intangible assets, and compare that value to the carrying value. If the carrying value of goodwill and indefinite-lived assets exceeds the implied fair value, an impairment loss is required to be recorded.

For all years presented, Headwaters performed a step 0 qualitative evaluation for both the construction materials and building products reporting units and concluded that it was more likely than not that the fair values exceeded the carrying amounts of goodwill and indefinite-lived assets. Accordingly, further step 1 and step 2 testing for impairment was not required to be performed.

#### 7. Long-Term Debt

The total undiscounted face amount of Headwaters’ outstanding long-term debt was approximately \$573.9 million as of September 30, 2015 and \$768.8 million as of September 30, 2016. As of those dates, the discounted carrying value of long-term debt consisted of the following:

(in thousands)	2015	2016
Senior secured term loan, due March 2022 (face amount \$423,938 as of September 30, 2015 and \$768,804 as of September 30, 2016)	\$ 414,490	\$ 754,501
7¼% Senior notes, due January 2019 (face amount \$150,000)	147,840	—
Carrying amount of long-term debt, net of discounts and debt issue costs	562,330	754,501
Less current portion	(4,250)	(7,785)
<b>Long-term debt</b>	<b>\$ 558,080</b>	<b>\$ 746,716</b>

Senior Secured Term Loan — In March 2015, Headwaters entered into a new Term Loan Facility, under which a senior secured loan for \$425.0 million was obtained. In August 2016, Headwaters entered into an Incremental Amendment to the Term Loan Facility for an additional senior secured loan totaling \$350.0 million. The entire combined loan will mature in March 2022. The Term Loan Facility requires scheduled quarterly repayments in an aggregate annual amount equal to approximately 1.0% of the original combined principal amounts (subject to reduction for certain permitted prepayments), with the balance due at maturity. Headwaters determined that the \$350.0 million incremental amendment constituted a debt modification. As described below, a portion of the proceeds was used to redeem the remaining outstanding \$99.0 million of the 7¼% Senior Notes.

The Term Loan Facility allows Headwaters to request one or more incremental term loans and certain other types of incremental debt in an aggregate amount not to exceed \$150.0 million plus an additional amount which is dependent on Headwaters’ pro forma net leverage ratio, as defined. Any additional borrowings are contingent upon the receipt of commitments by existing or additional lenders.

Borrowings under the Term Loan Facility bear interest at a rate equal to, at Headwaters’ option, either (a) a base rate determined by reference to the highest of (i) the publicly announced prime rate of the administrative agent, (ii) the federal funds rate plus 0.50%, and (iii) the eurocurrency (LIBO) rate for a one-month interest period plus 1.0%, subject in all cases to a 2.0% floor; or (b) a eurocurrency (LIBO) rate determined by reference to the cost of funds for eurocurrency deposits in dollars, subject to a 1.0% floor; plus, in each case, an applicable margin of 3.0% for any

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

eurocurrency loan and 2.0% for any alternate base rate loan. Interest is payable quarterly, and as of September 30, 2016, the interest rate on borrowings under the Term Loan Facility was 4.0%.

Headwaters may voluntarily repay outstanding loans under the Term Loan Facility at any time without premium or penalty, other than customary breakage costs with respect to LIBO rate loans, which shall be subject to a prepayment premium of 1.0%. The Term Loan Facility requires Headwaters to prepay outstanding term loans, subject to certain exceptions, with (i) up to 50% of Headwaters' annual excess cash flow, as defined, to the extent such excess cash flow exceeds \$1.0 million, commencing with fiscal year 2016, with such required prepayment to be reduced by the amount of voluntary prepayments of term loans and certain other types of senior secured debt; (ii) 100% of the net cash proceeds of certain non-ordinary course asset sales; and (iii) 100% of the net cash proceeds of certain issuances of debt.

The Term Loan Facility is secured by substantially all assets of Headwaters, except that the obligations have a second priority position with respect to the assets that secure Headwaters' ABL Revolver, primarily consisting of certain trade receivables and inventories of Headwaters' building products and construction materials segments. The Term Loan Facility contains customary covenants restricting the ability of Headwaters to incur additional debt and liens on assets, prepay future new subordinated debt, merge or consolidate with another company, sell all or substantially all assets, make investments and pay dividends or distributions, among other things. The Term Loan Facility contains customary events of default, including with respect to a change in control of Headwaters. Headwaters was in compliance with all covenants as of September 30, 2016.

The net proceeds from the initial borrowing under the Term Loan Facility were approximately \$414.7 million, after giving effect to original issue discount of approximately \$2.1 million and transaction costs of approximately \$8.2 million. As described below, the net proceeds from the original borrowing under the Term Loan Facility were primarily used to pay the redemption price for all of the outstanding 7-5/8% senior secured notes. The net proceeds from the incremental 2016 borrowing under the Term Loan Facility were approximately \$341.6 million after giving effect to original issue discount of approximately \$0.9 million and transaction costs of approximately \$7.5 million, which consisted of \$1.8 million in non-capitalizable costs charged to interest expense and \$5.7 million of debt issuance costs. As described below, a portion of the net proceeds from the incremental borrowing under the Term Loan Facility were used to pay the redemption price for all of the remaining outstanding 7¼% Senior Notes. Most of the remaining proceeds were used to acquire Krestmark as described in Note 4.

ABL Revolver — Since entering into the ABL Revolver, Headwaters has not borrowed any funds under the arrangement and has no borrowings outstanding as of September 30, 2016. Availability under the ABL Revolver cannot exceed \$70.0 million, which includes a \$35.0 million sub-line for letters of credit and a \$10.5 million swingline facility. Availability under the ABL Revolver is further limited by the borrowing base valuations of the assets of Headwaters' building products and construction materials segments which secure the borrowings, currently consisting of certain trade receivables and inventories. In addition to the first lien position on these assets, the ABL Revolver lenders have a second priority position on substantially all other assets of Headwaters.

As of September 30, 2016, Headwaters had secured letters of credit under the ABL Revolver of approximately \$8.6 million for various purposes and had availability under the ABL Revolver of approximately \$59.4 million. The ABL Revolver terminates in March 2020. There is a contingent provision for early termination at any time within three months prior to the earliest maturity date of the senior secured Term Loan Facility at which time any amounts borrowed must be repaid.

Outstanding borrowings under the ABL Revolver accrue interest at Headwaters' option, at either i) the London Interbank Offered Rate (LIBOR) plus 1.5%, 1.75% or 2.0%, depending on Headwaters' average net excess availability under the ABL; or ii) the "Base Rate" plus 0.25%, 0.5% or 0.75%, again depending on average net excess availability. The base rate is subject to a floor equal to the highest of i) the prime rate, ii) the federal funds rate plus 0.5%, and iii) the 30-day LIBO rate plus 1.0%. Fees on the unused portion of the ABL Revolver range from 0.25% to 0.375%, depending on the amount of the credit facility which is utilized. If there would have been borrowings outstanding under the ABL Revolver as of September 30, 2016, the interest rate on those borrowings would have been approximately 2.4%.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The ABL Revolver contains restrictions and covenants common to such agreements, including limitations on the incurrence of additional debt and liens on assets, prepayment of subordinated debt, merging or consolidating with another company, selling assets, making acquisitions and investments and the payment of dividends or distributions, among other things. In addition, if availability under the ABL Revolver is less than 12.5%, Headwaters is required to maintain a monthly fixed charge coverage ratio of at least 1.0x for the preceding twelve-month period. Headwaters was in compliance with all covenants as of September 30, 2016.

7¼% Senior Notes — In December 2013, Headwaters issued \$150.0 million of 7¼% senior notes. Pursuant to open market transactions during the March 2016 quarter, Headwaters repurchased and cancelled approximately \$3.75 million of the 7¼% senior notes. In July 2016, Headwaters redeemed \$47.25 million of these notes at a redemption price equal to 103.625% of the principal amount. In September 2016, Headwaters redeemed the remaining \$99.0 million of the notes at a redemption price equal to 103.625% of the principal amount. The associated premiums and accelerated debt issue costs for all of the transactions, aggregating approximately \$7.0 million, were charged to interest expense.

7-5/8% Senior Secured Notes — In 2011, Headwaters issued \$400.0 million of 7-5/8% senior secured notes. In March 2015, Headwaters irrevocably deposited with the trustee of the notes an amount sufficient to pay and discharge all obligations under the notes and the related indenture, which discharge the trustee acknowledged. This discharge resulted in a loss on extinguishment of debt of approximately \$21.3 million, comprised of the early repayment premium of approximately \$15.3 million, interest to the April 2015 redemption date totaling approximately \$2.5 million, and accelerated amortization of unamortized debt issue costs of approximately \$3.5 million. The loss on debt extinguishment is reflected as interest expense in Headwaters' statement of income for 2015.

Convertible Senior Subordinated Notes — Pursuant to open market transactions in February 2015, Headwaters repurchased and canceled substantially all of the outstanding 8.75% convertible senior subordinated notes, aggregating approximately \$49.0 million. Premiums and accelerated amortization of debt discount and debt issue costs aggregating approximately \$3.5 million were paid and charged to interest expense.

Headwaters' Chairman and CEO was a holder of \$1.16 million of the 8.75% notes, which holding was purchased in the open market. Due to immateriality, the remaining balance of these convertible notes was included with other accrued liabilities in the consolidated balance sheet as of September 30, 2015. The notes matured in the March 2016 quarter in normal course and were repaid.

Interest Costs and Debt Maturities — During 2014, Headwaters incurred total interest costs of approximately \$46.9 million, including approximately \$2.2 million of non-cash interest expense. During 2015, Headwaters incurred total interest costs of approximately \$64.9 million, including approximately \$6.2 million of non-cash interest expense. During 2016, Headwaters incurred total interest costs of approximately \$43.3 million, including approximately \$4.0 million of non-cash interest expense. As described above, approximately \$21.3 million and \$7.0 million of interest expense incurred in 2015 and 2016, respectively resulted from the early repayment of the 7-5/8% senior secured notes and the 7¼% senior notes. In 2016, there was also approximately \$3.1 million of non-routine interest expense associated with other debt transactions. Neither capitalized interest nor interest income was material for any period presented.

The weighted-average interest rate on the face amount of outstanding long-term debt, excluding amortizable debt discount and debt issue costs, was approximately 5.2% at September 30, 2015 and 4.0% at September 30, 2016. Except for the required repayments of the Term Loan Facility of approximately \$1.9 million per quarter, Headwaters has no debt maturities until March 2022.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Future maturities of long-term debt as of September 30, 2016 are shown in the following table:

<u>Year Ended September 30,</u>	<u>(in thousands)</u>
2017	\$ 7,785
2018	7,785
2019	7,785
2020	7,785
2021	7,785
Thereafter	729,879
<b>Total long-term debt</b>	<b>\$ 768,804</b>

#### 8. Fair Value of Financial Instruments

Headwaters' material financial instruments consist primarily of cash and cash equivalents, trade receivables, accounts payable and long-term debt. All of these financial instruments except some long-term debt are either carried at fair value in the consolidated balance sheets or are short-term in nature. Accordingly, the carrying values for those financial instruments as reflected in the consolidated balance sheets closely approximate their fair values.

As of September 30, 2015, only the 7¼% senior notes had a fixed rate and the aggregate fair value of this debt as of September 30, 2015 would have been approximately \$156.4 million, compared to a carrying value of \$147.8 million. As of September 30, 2016, none of Headwaters' outstanding long-term debt is fixed rate.

Fair value "Level 2" estimates for long-term debt were based primarily on price estimates from broker-dealers.

#### 9. Income Taxes

Headwaters recorded income tax expense of approximately \$3.6 million in 2014. For 2014, Headwaters recorded a full valuation allowance on its net amortizable deferred tax assets and accordingly, did not recognize benefit for tax credit carryforwards, net operating loss (NOL) carryforwards or other deferred tax assets, except to the extent of earnings. The reported 18% effective tax rate for 2014 was due primarily to state income taxes in certain state jurisdictions.

In 2015, Headwaters recorded an income tax benefit of approximately \$94.5 million, primarily due to the release of approximately \$109.3 million of the valuation allowance established in prior years. A valuation allowance is required when there is significant uncertainty as to the realizability of deferred tax assets. Realization of deferred tax assets is dependent upon Headwaters' ability to generate sufficient taxable income within the carryforward periods provided for in the tax law for each tax jurisdiction. Headwaters considered the following possible sources of taxable income when assessing the realization of its deferred tax assets:

- future reversals of existing taxable temporary differences;
- future taxable income or loss, exclusive of reversing temporary differences and carryforwards;
- tax-planning strategies; and
- taxable income in prior carryback years.

Headwaters considered both positive and negative evidence in determining the continued need for a valuation allowance, including the following:

##### Positive evidence:

- Current forecasts indicated that Headwaters would generate pre-tax income and taxable income in the future.
- Headwaters had a three-year cumulative income as of September 30, 2015.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

- A majority of Headwaters' tax attributes have significant carryover periods of 20 years or more.

Negative evidence:

- Headwaters operates in cyclical industries that are difficult to forecast.

Headwaters placed more weight on objectively verifiable evidence than on other types of evidence and management believed that available positive evidence outweighed the available negative evidence. Management therefore determined that Headwaters met the "more likely than not" threshold that NOLs, tax credits and other deferred tax assets will be realized. Accordingly, a full valuation allowance was no longer deemed to be required as of September 30, 2015. A valuation allowance of approximately \$10.1 million was maintained against capital loss carryforwards, certain state NOL carryforwards, and certain tax credit carryforwards as of September 30, 2015.

All of the factors Headwaters considered in evaluating whether and when to release all or a portion of the deferred tax asset valuation allowance involved significant judgment. For example, there are many different interpretations of "cumulative income or losses in recent years" which can be used. Also, significant judgment is involved in making projections of future financial and taxable income, especially because Headwaters' financial results are significantly dependent upon industry trends, including new housing construction, repair and remodeling, and infrastructure construction. Most of the end use categories in which Headwaters sells its products and services are currently in varying states of recovery from the historic downturn experienced several years ago; however, it is not possible to accurately predict whether recovery will continue, and if it does, at what rate and for how long.

Headwaters recorded income tax expense of approximately \$22.8 million in 2016. The reported 31% effective rate for 2016 is the result of Headwaters being subject to normal statutory rates following the valuation allowance reversal in 2015. The reported effective tax rate is less than the statutory rate primarily due to unrecognized income tax benefits that were reversed due to audit periods that closed and changes to prior year estimated amounts for research and development tax credits.

As of September 30, 2016, Headwaters' U.S. and state NOL and capital loss carryforwards totaled approximately \$43.0 million (tax effected). The NOLs expire from 2017 to 2036. In addition, there are approximately \$27.4 million of tax credit carryforwards as of September 30, 2016, which expire from 2025 to 2036. A valuation allowance of approximately \$10.4 million was recorded against capital loss carryforwards, certain state NOL carryforwards, and certain tax credit carryforwards as of September 30, 2016.

The income tax provision consisted of the following for the years ended September 30:

<i>(in thousands)</i>	2014	2015	2016
<b>Current tax benefit (provision):</b>			
Federal	\$ 65	\$ 8	\$ (272)
State	(1,973)	(2,027)	246
<b>Total current tax provision</b>	<b>(1,908)</b>	<b>(2,019)</b>	<b>(26)</b>
<b>Deferred tax benefit (provision):</b>			
Federal	(10,956)	(14,100)	(23,332)
State	1,296	1,300	810
Change in valuation allowance	7,994	109,277	(208)
<b>Total deferred tax benefit (provision)</b>	<b>(1,666)</b>	<b>96,477</b>	<b>(22,730)</b>
<b>Total income tax benefit (provision)</b>	<b>\$ (3,574)</b>	<b>\$ 94,458</b>	<b>\$ (22,756)</b>



## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The provision for income taxes differs from the amount computed using the statutory federal income tax rate due to the following:

<i>(in thousands)</i>	2014	2015	2016
Tax provision at U.S. statutory rate	\$ (7,016)	\$ (13,185)	\$ (25,352)
State income taxes, net of federal tax effect	(1,973)	(931)	(1,349)
Valuation allowance	7,994	109,277	(208)
Non-deductible executive compensation	(1,242)	(105)	—
Tax credits	305	186	1,741
Unrealized gains	—	—	1,558
Unrecognized tax benefits	101	706	3,570
Other	(1,743)	(1,490)	(2,716)
<b>Income tax benefit (provision)</b>	<b>\$ (3,574)</b>	<b>\$ 94,458</b>	<b>\$ (22,756)</b>

The components of Headwaters' deferred income tax assets and liabilities were as follows as of September 30:

<i>(in thousands)</i>	2015	2016
<b>Deferred tax assets:</b>		
NOL and capital loss carryforwards	\$ 67,505	\$ 43,038
Tax credit carryforwards	24,954	27,406
Estimated liabilities	19,240	23,439
Stock-based compensation	5,903	5,480
Debt repurchase premium	5,154	5,635
Reserves and allowances	2,469	3,708
Other	3,176	549
Valuation allowances	(10,146)	(10,354)
Total deferred tax assets	118,255	98,901
<b>Deferred tax liabilities:</b>		
Property, plant and equipment basis differences	(15,797)	(18,630)
Goodwill and intangible asset basis differences	(9,606)	(12,212)
Total deferred tax liabilities	(25,403)	(30,842)
<b>Net deferred tax asset</b>	<b>\$ 92,852</b>	<b>\$ 68,059</b>

A reconciliation of the change in the amount of gross unrecognized income tax benefits, not including interest and penalties, is as follows:

<i>(in thousands)</i>	2014	2015	2016
Gross unrecognized income tax benefits at beginning of year	\$ 4,552	\$ 4,497	\$ 5,002
Changes based on tax positions related to the current year	—	25	122
Increases for tax positions related to prior years	—	1,055	1,437
Settlements	—	—	(417)
Lapse of statute of limitations	(55)	(575)	(3,082)
<b>Gross unrecognized income tax benefits at end of year</b>	<b>\$ 4,497</b>	<b>\$ 5,002</b>	<b>\$ 3,062</b>

During 2014, Headwaters accrued approximately \$0.1 million of liabilities for interest and penalties. During 2015, Headwaters released approximately \$0.2 million of liabilities for interest and penalties. During 2016, Headwaters released approximately \$1.8 million of liabilities for interest and penalties and as of September 30, 2016, approximately \$0.7 million was accrued for the payment of interest and penalties. Changes to the estimated liability during 2014, 2015 and 2016 were primarily the result of the expiration of statute of limitation time periods. As of September 30, 2016, approximately \$2.8 million of unrecognized income tax benefits would affect the 2016 effective tax rate if released into income.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

The calculation of tax liabilities involves uncertainties in the application of complex tax regulations in multiple tax jurisdictions. Headwaters currently has open tax years subject to examination by the IRS and state tax authorities for the years 2013 through 2016. Headwaters recognizes potential liabilities for anticipated tax audit issues in the U.S. and state tax jurisdictions based on estimates of whether, and the extent to which, additional taxes and interest will be due. If events occur (or do not occur) as expected and the payment of these amounts ultimately proves to be unnecessary, the reversal of the liabilities would result in tax benefits being recognized in the period when it is determined the liabilities are no longer required to be recorded in the consolidated financial statements. If the estimate of tax liabilities proves to be less than the ultimate assessment, a further charge to expense would result. It is reasonably possible that the amount of Headwaters' unrecognized income tax benefits could change significantly within the next 12 months. These changes could be the result of Headwaters' ongoing tax audits, the settlement of outstanding audit issues or the lapse of tax statutes of limitation. However, due to the issues being examined, at the current time, an estimate of the range of reasonably possible outcomes cannot be made, beyond amounts currently accrued.

#### 10. Equity Securities and Stock-Based Compensation

Authorized Stock — In addition to the 200.0 million shares of authorized common stock, Headwaters also has 10.0 million shares of authorized preferred stock. No preferred stock was issued or outstanding as of September 30, 2016 or at any time during the periods presented.

Shelf Registration — In August 2015, Headwaters filed a universal shelf registration statement with the SEC. A prospectus supplement describing the terms of any future securities to be issued is required to be filed before any offering can commence under the registration statement.

Treasury Shares Held for Deferred Compensation Obligation — In accordance with the terms of the Directors' Deferred Compensation Plan (DDCP), non-employee directors can elect to defer certain compensation and choose from various options how the deferred compensation will be invested. One of the investment options is Headwaters common stock. When a director chooses Headwaters stock as an investment option, Headwaters purchases the common stock in accordance with the director's request and holds the shares until such time as the deferred compensation obligation becomes payable, normally when the director retires from the Board. At such time, the shares held by Headwaters are distributed to the director in satisfaction of the obligation. Headwaters accounts for the purchase of common stock as treasury stock, at cost. The corresponding deferred compensation obligation is reflected in capital in excess of par value. Changes in the fair value of the treasury stock are not recognized. As of September 30, 2016, the treasury stock and related deferred compensation obligation had fair values of approximately \$1.8 million, which was \$0.4 million higher than the carrying values at cost.

Grants and Cancellations of Stock Incentive Awards — The Compensation Committee of Headwaters' Board of Directors (the Committee) approved grants of approximately 0.5 million, 0.3 million and 0.3 million stock-based awards during 2014, 2015 and 2016, respectively. The awards consisted of stock-settled SARs and restricted stock granted to officers and employees.

All stock-based awards for the years 2014 through 2016 and subsequent thereto were granted under the stockholder-approved 2010 Incentive Compensation Plan, and all of the SARs vest over an approximate three-year period, have an exercise price equal to the fair market value of Headwaters' common stock on the dates of grant and a contractual term of 10 years. Vesting of the SARs and restricted stock granted prior to September 30, 2015 was subject to 60-day average stock price hurdles that precluded vesting unless the stock price exceeded by predetermined amounts the stock prices on the dates of grant, which thresholds must be reached prior to the final vest dates. The stock price thresholds for all of those SAR and restricted stock grants were met. Vesting of the SARs and restricted stock granted in fiscal 2016 was subject to a ratio of adjusted EBITDA compared to 1.5 times cash interest expense added to capital expenditures, which threshold must be reached when computed quarterly on a trailing 12-month basis beginning at the end of the fiscal year prior to the final vest date. The adjusted EBITDA ratio threshold was met at September 30, 2016. When exercised by grantees, stock-settled SARs are settled in Headwaters' common stock. Headwaters has also granted cash-settled SARs as described in Note 12.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

**Stock-Based Compensation** — Stock-based compensation expense was approximately \$2.2 million in 2014, \$2.8 million in 2015 and \$3.2 million in 2016. The total income tax benefit recognized for stock-based compensation in the consolidated statements of income was \$0 for 2014, \$1.0 million for 2015, and \$1.1 million for 2016.

**Valuation Assumptions** — The fair values of stock-settled SARs have been estimated using the B-S-M model. The following table summarizes the assumptions used in determining the fair values of these awards for the years indicated.

	2014	2015	2016
Expected stock volatility	60 %	60 %	55 %
Risk-free interest rates	1.4% - 2.0 %	1.0% - 1.7 %	1.6% - 2.0 %
Expected lives (beyond vest dates)	4 years	4 years	6 years
Dividend yield	0 %	0 %	0 %

Expected stock price volatility was estimated primarily using historical volatilities of Headwaters' stock. Implied volatilities of traded options on Headwaters' stock, volatility predicted by other models, and an analysis of volatilities used by other public companies in comparable lines of business to Headwaters were also considered. Risk-free interest rates used were the U.S. Treasury bond yields with terms corresponding to the expected terms of the awards being valued. In estimating expected lives, Headwaters considered the contractual and vesting terms of awards, along with historical experience; however, due to insufficient pertinent historical data from which to reliably estimate expected lives, Headwaters used estimates based on the "simplified method" set forth by the SEC in Staff Accounting Bulletins No. 107 and 110, where expected life is estimated by summing the award's vesting term and contractual term and dividing that result by two. Insufficient historical data from which to more reliably estimate expected lives is expected to exist for the foreseeable future due to the varying terms of awards granted in recent and past years, along with other factors.

**Equity Compensation Plans** — Headwaters has five equity compensation plans under which outstanding awards have been granted, four of which have been approved by stockholders. In connection with stockholder approval of the newest plan, the 2010 Incentive Compensation Plan (2010 ICP), Headwaters agreed to not issue any additional stock-based awards under any of its other existing incentive compensation plans. Following the grants of equity-based awards made subsequent to September 30, 2016, approximately 3.5 million shares were available for future grants under the 2010 ICP.

Headwaters uses newly issued shares to meet its obligations to issue stock when awards are exercised. The Committee, or in its absence the full Board, administers and interprets all equity compensation plans. This Committee is authorized to grant stock-based awards and other awards both under the plans and outside of any plan to eligible employees, officers, directors, and consultants of Headwaters. Terms of awards granted under the plans, including vesting requirements, are determined by the Committee and historically have varied significantly. Most outstanding awards granted under the plans vest over a three-year period, expire ten years from the date of grant and are not transferable other than by will or by the laws of descent and distribution.

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Stockholder Approval of Equity Compensation Plans — The following table presents information related to stockholder approval of equity compensation plans as of September 30, 2016:

Plan Category	<i>(in thousands of shares)</i>		
	Maximum shares to be issued upon exercise of options and other awards	Weighted-average exercise price of outstanding options and other awards	Shares remaining available for future issuance under existing equity compensation plans (excluding shares reflected in the first column)
Plans approved by stockholders	3,448	\$ 6.73	3,469
Plan not approved by stockholders	203	15.22	—
<b>Total</b>	<b>3,651</b>	<b>\$ 7.20</b>	<b>3,469</b>

Stock Options — The following table summarizes the activity for all of Headwaters' stock options:

<i>(in thousands, except per-share amounts)</i>	Shares	Weighted-average exercise price	Weighted-average remaining contractual term in years	Aggregate intrinsic value
<b>Outstanding at September 30, 2013</b>	618	\$ 27.42		
Forfeited or expired	(437)	26.28		
<b>Outstanding at September 30, 2014</b>	<b>181</b>	<b>\$ 30.17</b>	<b>1.0</b>	<b>\$ 0</b>
Forfeited or expired	(85)	32.62		
<b>Outstanding at September 30, 2015</b>	<b>96</b>	<b>\$ 27.99</b>	<b>0.8</b>	<b>\$ 126</b>
Forfeited or expired	(72)	32.80		
<b>Outstanding at September 30, 2016</b>	<b>24</b>	<b>\$ 13.57</b>	<b>1.1</b>	<b>\$ 80</b>
<b>Exercisable at September 30, 2014</b>	<b>181</b>	<b>\$ 30.17</b>	<b>1.0</b>	<b>\$ 0</b>
<b>Exercisable at September 30, 2015</b>	<b>96</b>	<b>\$ 27.99</b>	<b>0.8</b>	<b>\$ 126</b>
<b>Exercisable at September 30, 2016</b>	<b>24</b>	<b>\$ 13.57</b>	<b>1.1</b>	<b>\$ 80</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

SARs — The following table summarizes the activity for all of Headwaters' stock-settled SARs:

<i>(in thousands, except per-share amounts)</i>	Shares	Weighted-average threshold price	Weighted-average remaining contractual term in years	Aggregate intrinsic value
<b>Outstanding at September 30, 2013</b>	3,639	\$ 7.25		
Granted	314	9.19		
Exercised	(146)	5.18		
Forfeited or expired	(77)	16.15		
<b>Outstanding at September 30, 2014</b>	<b>3,730</b>	<b>\$ 7.31</b>	<b>5.7</b>	<b>\$ 22,893</b>
Granted	234	\$ 13.03		
Exercised	(344)	6.92		
Forfeited or expired	(42)	24.83		
<b>Outstanding at September 30, 2015</b>	<b>3,578</b>	<b>\$ 7.52</b>	<b>5.1</b>	<b>\$ 41,685</b>
Granted	173	\$ 17.83		
Exercised	(195)	7.85		
Forfeited or expired	(81)	30.73		
<b>Outstanding at September 30, 2016</b>	<b>3,475</b>	<b>\$ 7.47</b>	<b>4.5</b>	<b>\$ 33,461</b>
<b>Exercisable at September 30, 2014</b>	<b>3,418</b>	<b>\$ 7.21</b>	<b>5.5</b>	<b>\$ 21,604</b>
<b>Exercisable at September 30, 2015</b>	<b>3,320</b>	<b>\$ 7.21</b>	<b>4.8</b>	<b>\$ 39,793</b>
<b>Exercisable at September 30, 2016</b>	<b>3,283</b>	<b>\$ 6.98</b>	<b>4.2</b>	<b>\$ 33,161</b>

The weighted-average grant-date fair value of SARs granted was \$4.40, \$6.41 and \$9.37 in 2014, 2015 and 2016, respectively. The total intrinsic value of SARs exercised was approximately \$1.1 million, \$3.9 million and \$2.1 million in 2014, 2015 and 2016, respectively.

Other Stock-Based Awards and Unrecognized Compensation Cost — In addition to the SARs granted as reflected in the table above, during 2014 through 2016 Headwaters also issued approximately 0.2 million shares of restricted common stock to officers and employees, all of which vests over an approximate three-year period. The restricted stock was issued at no cost to the recipients and compensation expense equal to the trading price of the stock on the dates of grant is therefore recognized over the respective vesting periods, which also represent the requisite service periods. The following table summarizes the activity for Headwaters' nonvested restricted stock during 2016:

<i>(in thousands of shares)</i>	Shares	Weighted-average grant date fair value
<b>Outstanding at beginning of year</b>	<b>126</b>	<b>\$ 11.51</b>
Granted	90	17.83
Vested	(117)	12.66
Forfeited	(1)	11.46
<b>Outstanding at end of year</b>	<b>98</b>	<b>\$ 15.98</b>

Headwaters also recognizes compensation expense in connection with its Employee Stock Purchase Plan (ESPP). Compensation expense related to restricted stock and the ESPP was approximately \$0.9 million, \$1.4 million and \$1.6 million in 2014, 2015 and 2016, respectively.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

As of September 30, 2016, there was approximately \$2.5 million of total compensation cost related to unvested awards not yet recognized, which will be recognized over a weighted-average period of approximately 1.7 years.

#### 11. Earnings Per Share

The following table sets forth the computations of basic and diluted EPS for the years indicated, reflecting the amounts attributable to Headwaters and excluding the amounts attributable to the non-controlling interest in Entegra. In accordance with ASC 260, income from continuing operations for each period is used as the control number in determining whether potentially dilutive common shares should be included in the diluted earnings per share computations for those periods, even when the effect of doing so is anti-dilutive to the other per-share amounts.

<i>(in thousands, except per-share amounts)</i>	2014	2015	2016
<b>Numerator:</b>			
Income from continuing operations	\$ 16,473	\$ 132,128	\$ 49,679
Income from continuing operations attributable to non-controlling interest	(774)	(869)	(1,667)
Adjustment of estimated redemption value of non-controlling interest	(176)	—	—
Numerator for basic and diluted earnings per share from continuing operations — income from continuing operations attributable to Headwaters Incorporated	15,523	131,259	48,012
Numerator for basic and diluted earnings per share from discontinued operations — income (loss) from discontinued operations, net of income taxes	(415)	(460)	84
Numerator for basic and diluted earnings per share — net income attributable to Headwaters Incorporated	<u>\$ 15,108</u>	<u>\$ 130,799</u>	<u>\$ 48,096</u>
<b>Denominator:</b>			
Denominator for basic earnings per share — weighted-average shares outstanding	73,160	73,570	73,842
Effect of dilutive securities — shares issuable upon exercise of options and SARs and vesting of restricted stock	1,291	2,032	1,573
Denominator for diluted earnings per share — weighted-average shares outstanding after assumed exercises and vesting	<u>74,451</u>	<u>75,602</u>	<u>75,415</u>
<b>Basic income per share attributable to Headwaters Incorporated:</b>			
From continuing operations	\$ 0.21	\$ 1.79	\$ 0.65
From discontinued operations	(0.01)	(0.01)	—
	<u>\$ 0.20</u>	<u>\$ 1.78</u>	<u>\$ 0.65</u>
<b>Diluted income per share attributable to Headwaters Incorporated:</b>			
From continuing operations	\$ 0.21	\$ 1.74	\$ 0.64
From discontinued operations	(0.01)	(0.01)	—
	<u>\$ 0.20</u>	<u>\$ 1.73</u>	<u>\$ 0.64</u>
<b>Anti-dilutive securities not considered in diluted EPS calculation:</b>			
Stock-settled SARs	2,279	1,258	273
Stock options	446	89	18
Restricted stock	126	66	—

#### 12. Commitments and Contingencies

Commitments and contingencies as of September 30, 2016 not disclosed elsewhere, are as follows.

**Leases** — Headwaters has noncancellable operating leases for certain facilities and equipment. These leases, most of which are in the construction materials segment, currently are set to expire in various years through 2033, but many have renewal options under which the lease term can be extended. Rental expense was approximately

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

\$33.4 million, \$34.4 million and \$36.2 million in 2014, 2015 and 2016, respectively. As of September 30, 2016, minimum rental payments due under these leases are as follows:

<i>Year ending September 30,</i>	<i>(in thousands)</i>
2017	\$ 34,096
2018	28,053
2019	21,936
2020	16,448
2021	21,751
Thereafter	54,898
	<b>\$ 177,182</b>

Purchase Commitments — Certain CCP contracts with suppliers require Headwaters to make minimum purchases of CCP materials. Actual purchases under contracts with minimum requirements were approximately \$20.3 million, \$32.7 million and \$44.8 million in 2014, 2015 and 2016, respectively. As of September 30, 2016, minimum future purchase requirements are as follows:

<i>Year ending September 30,</i>	<i>(in thousands)</i>
2017	\$ 25,845
2018	24,670
2019	25,218
2020	25,784
2021	25,961
Thereafter	92,896
	<b>\$ 220,374</b>

Compensation Arrangements — Employment Agreements. Headwaters has entered into employment agreements with its Chief Executive Officer (CEO), Chief Financial Officer (CFO) and five other employees. The agreements have original terms of approximately three to five years and the CEO and CFO agreements are renewable for one-year terms. The CEO's agreement calls for supplemental retirement contributions equal to 72.5% of his salary during a portion of the term of the agreement and 42.5% thereafter. The aggregate commitment for salaries and other obligations for all future periods as of September 30, 2016, assuming no renewals, is approximately \$5.4 million. The agreements also provide for certain termination benefits. If the officers' and employees' employment would have terminated on September 30, 2016 (but not by reason of a change in control, which is described hereafter), the aggregate termination benefits as of that date would have been approximately \$12.0 million, of which approximately \$4.1 million has been expensed and accrued.

Executive Change in Control Agreements. The Compensation Committee (Committee) has approved "Executive Change in Control Agreements" with certain officers and employees. Upon a change in control, as defined, the agreements provide for immediate vesting and exercisability of all outstanding stock-based awards. In addition, if termination of employment occurs within a specified period of a change in control, the agreements provide for i) severance pay equal to a stipulated multiple of the sum of the person's current annual salary plus a bonus component based on either past bonuses paid or the target bonus for the fiscal year in which the change in control occurs; and ii) continuance of health and other benefits and perquisites for a stipulated period following the change in control. Further, if any long-term cash awards are not continued, payment shall be made based on the pro-rated level of performance achieved as of the end of the most recently completed fiscal quarter. If terminations associated with a change in control would have occurred on September 30, 2016, the cash severance payments due to the officers and employees (including amounts due under long-term cash awards and the estimated costs of continuing benefits and perquisites) and the excess of the market value of unvested stock-based awards on that date above related exercise prices

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

would have aggregated approximately \$24.5 million (of which approximately \$9.9 million has been expensed and accrued).

*Cash Performance Unit Awards.* In 2014, the Committee approved grants of performance unit awards to certain officers and employees, to be settled in cash, based on the achievement of cash flow generated during 2014. For purposes of these awards, cash flow is generally defined as operating income plus depreciation, amortization and asset impairments, reduced by capital expenditures. The number of awards granted was determined using a target compensation amount for each participant and was adjusted, subject to prescribed limitations, based on the actual cash flow generated during the 2014 performance year, using a threshold/target/maximum adjustment structure. The awards provided for 50% vesting as of September 30, 2015 and 50% vesting as of September 30, 2016, provided the participant was still employed by Headwaters on those vest dates. The terms of the awards also provided for i) adjustment for changes in Headwaters' average stock price for the 60 days prior to and including September 30, 2014 as compared to Headwaters' average stock price for the 60 days prior to and including September 30, 2013, and ii) potential further adjustment based on cash flows generated in the two years subsequent to the year of grant, or base performance year. Approximately \$5.1 million of expense was recorded for the 2014 awards in 2014.

In 2015 and 2016, the Committee approved grants of performance unit awards to certain officers and employees for cash flow generated during those fiscal years, with terms similar to the 2014 awards described above. Approximately \$8.6 million and \$3.5 million of expense was recognized for these awards during 2015 and 2016, which amounts are subject to adjustment, depending on cash flows generated in future years. As of September 30, 2016, approximately \$13.7 million was accrued for all performance unit awards outstanding but unpaid as of that date.

*Cash-Settled SAR Grants.* In 2012, the Committee approved grants to certain officers and employees of approximately 1.0 million cash-settled SARs, none of which remain outstanding as of September 30, 2016, the termination date of these awards. These SARs, which were considered liability awards, vested in annual installments through September 30, 2014 and were settled in cash upon exercise by the employee.

In 2011, the Committee approved grants to certain employees of approximately 0.4 million cash-settled SARs, none of which remained outstanding as of September 30, 2015, the termination date of these awards. Compensation expense/(income) for all cash-settled SARs was approximately \$4.6 million for 2014, \$3.1 million for 2015 and \$(0.1) million for 2016.

Employee Benefit Plans — In addition to standard health and life insurance programs, Headwaters has six employee benefit plans that were operative during the years presented: the 401(k) Profit Sharing Plan (401(k) Plan), the 2000 Employee Stock Purchase Plan (ESPP), the Incentive Bonus Plan (IBP), the Deferred Compensation Plan (DCP), the 2010 Incentive Compensation Plan (2010 ICP) and an Executive Retirement Program (ERP). Substantially all employees of Headwaters are eligible to participate in the 401(k) Plan and the ESPP after meeting length of service requirements. Only designated employees are eligible to participate in the IBP, DCP, 2010 ICP and ERP.

The total expense for all of Headwaters' benefit plans combined, including all general and discretionary bonuses and cash-settled SARs, but excluding stock-settled SARs and ESPP expenses (which are included in stock-based compensation) and standard health and life insurance programs, was approximately \$26.7 million, \$34.8 million and \$23.8 million in 2014, 2015 and 2016, respectively.

*401(k) Plan.* Under the terms of the 401(k) Plan, eligible employees may elect to make tax-deferred contributions of up to 50% of their compensation, subject to statutory limitations. Headwaters has a "safe harbor" 401(k) plan which requires a mandatory minimum employer match of employee contributions and immediate vesting of employer contributions. Headwaters is not required to be profitable to make the matching contributions.



## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

*ESPP.* The ESPP provides eligible employees with an opportunity to purchase Headwaters common stock on favorable terms and to pay for such purchases through payroll deductions. Approximately 4.3 million shares of common stock have been reserved for issuance under the ESPP and approximately 2.3 million shares remain available for future issuance as of September 30, 2016. In accordance with terms of the ESPP, participating employees purchase shares of stock directly from Headwaters, which provides newly-issued shares to meet its commitment. The ESPP is intended to comply with Section 423 of the Internal Revenue Code, but is not subject to the requirements of ERISA. Employees purchase stock through payroll deductions of 1% to 10% of cash compensation, subject to certain limitations, which stock is purchased in a series of quarterly offerings. The cost per share to the employee is 85% of the stock's fair market value at the end of each quarterly offering period.

*IBP.* The IBP, the specifics of which are approved annually by the Committee, provides for annual cash bonuses to be paid if Headwaters accomplishes certain financial goals and if participating employees meet individual goals.

*DCP.* The DCP is a nonqualified plan that allows eligible employees to make tax-deferred contributions of up to 50% of their base compensation and 100% of their incentive compensation. Headwaters may match employee contributions up to a designated maximum rate, which matching contributions have historically vested after three years of plan eligibility. Headwaters also matches (similar to the "safe harbor" 401(k) match discussed above) certain employee contributions, again with immediate vesting of employer contributions. Headwaters is not required to be profitable to make the matching contributions.

*2010 ICP.* Following stockholder approval of the 2010 ICP, Headwaters has issued long-term cash and equity awards under that plan. Significant obligations under the 2010 ICP include i) the cash performance unit awards described above; ii) the cash-settled SAR grants described above; and iii) grants of certain stock-based awards described in Note 10.

*ERP.* In 2013, Headwaters initiated the ERP to provide retirement benefits to designated officers and employees. There is no formal plan document governing this program, which operates and is funded at the sole discretion of the Committee. Although it is the current intent of the Committee to consider funding the ERP annually, there is no obligation to make contributions in any amount for any period, irrespective of whether Headwaters is profitable. Headwaters' contributions to participants in the ERP vest 20% per year once a participant reaches the age of 61 and become fully vested at age 65.

Self Insurance — Headwaters has adopted self-insured medical insurance plans that cover substantially all employees. There is stop-loss coverage for amounts in excess of approximately \$0.2 million per individual per year. Headwaters also self insures for workers' compensation claims in most states, limited by stop-loss coverage which begins for amounts in excess of \$0.35 million per occurrence and approximately \$5.0 million in the aggregate annually. Headwaters has contracted with third-party administrators to assist in the payment and administration of claims. Insurance claims are recognized as expense when incurred and include an estimate of costs for claims incurred but not reported at the balance sheet date. As of September 30, 2016, approximately \$5.9 million was accrued for medical and workers' compensation claims incurred on or before September 30, 2016 that have not been paid or reported.

Property, Plant and Equipment — As of September 30, 2016, Headwaters was committed to spend approximately \$3.6 million on capital projects that were in various stages of completion.

Legal Matters — Headwaters has ongoing litigation and asserted claims which have been incurred during the normal course of business, including the specific matters discussed below. Headwaters intends to vigorously defend or resolve these matters by settlement, as appropriate. Management does not currently believe that the outcome of these matters will have a material adverse effect on Headwaters' operations, cash flow or financial position.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Headwaters incurred approximately \$5.1 million, \$2.2 million and \$(1.4) million of expense (credit) for legal matters in 2014, 2015 and 2016, respectively. Except for 2014, when \$2.8 million of expense was recorded for potential losses, costs for outside legal counsel comprised a majority of Headwaters' litigation-related costs in the years presented. Headwaters currently believes the range of potential loss for all unresolved legal matters, excluding costs for outside counsel, is from \$0 up to the amounts sought by claimants and has recorded a liability as of September 30, 2016 of \$0. The substantial claims and damages sought by claimants in excess of this amount are not currently deemed to be probable. Headwaters' outside counsel and management currently believe that unfavorable outcomes of outstanding litigation beyond the amount accrued are neither probable nor remote. Accordingly, management cannot express an opinion as to the ultimate amount, if any, of Headwaters' liability, nor is it possible to estimate what litigation-related costs will be in future periods.

The specific matters discussed below raise difficult and complex legal and factual issues, and the resolution of these issues is subject to many uncertainties, including the facts and circumstances of each case, the jurisdiction in which each case is brought, and the future decisions of juries, judges, and arbitrators. Therefore, although management believes that the claims asserted against Headwaters in the named cases lack merit, there is a possibility of material losses in excess of the amount accrued if one or more of the cases were to be determined adversely against Headwaters for a substantial amount of the damages asserted. It is possible that a change in the estimate of probable liability could occur, and the changes could be material. Additionally, as with any litigation, these proceedings require that Headwaters incur substantial costs, including attorneys' fees, managerial time and other personnel resources, in pursuing resolution.

*Fentress Families Trust.* VFL Technology Corporation (VFL), acquired by HRI in 2004, provides services related to fly ash management to Virginia Electric and Power Company (VEPCO). In February 2012, 383 plaintiffs, most of whom are residents living in the City of Chesapeake, Virginia, filed a complaint in the State of Virginia Chesapeake Circuit Court against 15 defendants, including VEPCO and related companies, and certain other persons associated with the Battlefield Golf Course, including owners, developers, contractors, and others, including VFL and Headwaters, alleging causes of action for nuisance and negligence. The complaint alleges that fly ash used to construct the golf course was carried in the air and contaminated surface water exposing plaintiffs to dangerous chemicals and causing personal injury and property damage. Plaintiffs' complaint seeks injunctive relief and damages of approximately \$850.0 million for removal and remediation of the fly ash and the water supply, \$1.9 billion for vexation, \$8.0 million and other unspecified amounts for personal injuries, and \$55.0 million as damages to properties, plus prejudgment interest, attorney fees, and costs. In a related case, other plaintiffs have filed a separate lawsuit asserting the same claims against the same defendants claiming additional damages totaling approximately \$307.2 million. In August 2013 the court ruled on VEPCO's demurrer ordering that claims for personal injury or property damage based upon allegations of groundwater contamination were dismissed but that claims of nuisance and negligence based upon allegations of air-borne ash and contaminated surface water would not be dismissed. In March 2016, the court responded to VFL's motion, ruling that (i) the statute of limitations barred nuisance and negligence claims of all plaintiffs who are not minors and who are not making personal injury claims, and (ii) emotional distress damages are not cognizable. Plaintiffs moved to amend their complaints, but the motion was denied in August 2016. All but seven Plaintiffs have asserted in discovery that they were not seeking personal injury damages except emotional distress. These cases are based on substantially the same alleged circumstances asserted in complaints filed by the plaintiffs in 2009 and voluntarily dismissed in 2010. Discovery is underway. HRI has filed claims for defense and indemnity with several of its insurers. In 2010, HRI filed suit in the United States District Court for the District of Utah against two insurers that denied coverage based on allegations in the 2009 Fentress complaints. The District Court ruled in the insurers' favor, which ruling was affirmed in October 2014 by the United States Court of Appeals for the Tenth Circuit. Another insurer continues to pay for the defense of the underlying cases under a reservation of rights. The relatively novel fly ash claims of the plaintiffs together with multiple insurance policies and policy periods make insurance coverage issues complex and uncertain. Moreover, plaintiffs' total claims exceed the potential limits of insurance available to HRI. Because resolution of the litigation is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of HRI's liability, or the insurers' obligation to indemnify HRI against loss, if any.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

*CPM.* In August 2015, CPM Virginia, LLC (CPM), the Battlefield Golf Course developer, filed a complaint in the State of Virginia Richmond Circuit Court against VEPCO, VFL, and Headwaters related to construction of the golf course described in the *Fentress Families Trust* case. The complaint alleges breach of contract, fraud, misrepresentation, estoppel, nuisance, breach of warranties, negligence, and interference with prospective business advantage. CPM's complaint seeks \$840 million in compensatory damages plus attorney fees and costs. VFL has moved to dismiss based on a failure to timely serve the suit on VFL.

In September 2015, CPM filed a separate complaint in the State of Virginia Chesapeake Circuit Court against VFL and Headwaters also related to construction of the golf course described in the *Fentress Families Trust* case, alleging breach of contract and seeking declaratory judgment and compensatory damages in the amount of \$0.5 million plus attorney fees and costs. CPM alleges that HRI should indemnify CPM for past and future expenses incurred in defending against the *Fentress* complaints. Because resolution of the CPM litigation is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of VFL or Headwaters' liability, or the insurers' obligation to indemnify VFL and Headwaters against loss, if any.

*Clary.* In August 2014, 77 plaintiffs filed suit in the State of West Virginia Circuit Court of Mason County against four defendants, including American Electric Power Co., Inc., Ohio Power Company and an individual. Plaintiffs claim injury resulting from exposure to coal combustion waste from the Gavin Power Plant in Cheshire, Ohio while working as employees of contractors in the Gavin landfill. Plaintiffs claim wrongful death, failure to warn and protect, negligence per se, negligence, negligent infliction of emotional distress, heightened duty, strict liability, battery, fraud, fraudulent concealment, misrepresentation and related causes of action, seeking unspecified damages for medical monitoring and other costs, loss of consortium, lost wages, personal injuries, and punitive damages. In September 2015, the Ohio Power Company filed a third-party complaint against Headwaters and two other entities who were contractors to Ohio Power Company. Ohio Power Company claims that the third-party defendant contractors operated the Gavin landfill and that plaintiffs are former employees or family members of the third-party defendants. Ohio Power Company denies the plaintiffs' allegations, but states that Headwaters and the other third-party defendants are required to indemnify Ohio Power and provide contribution to the extent that Ohio Power is found liable to plaintiffs, including interest, attorney fees, and costs. In April 2016, the case was reassigned to the State of West Virginia Mass Litigation Panel. Discovery is underway. The court's scheduling order has set trial to begin in September 2017. Because resolution of the litigation is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of Headwaters' liability, or whether insurers have an obligation to indemnify Headwaters against loss, if any.

*John River Cartage.* In January 2012 John River Cartage, Inc. filed suit in the State of Louisiana 18<sup>th</sup> Judicial District, Parish Pointe Coupee against Louisiana Generation, LLC, (LaGen), NRG Energy, Inc., and Headwaters Resources, Inc. (HRI). At the time of action, HRI provided CCP management services to LaGen in connection with LaGen's power generating plant located in New Roads, Louisiana. Plaintiff had been a subcontractor to a previous contractor to LaGen. Plaintiff's original complaint alleged that LaGen and HRI conspired to convert certain materials at the power plant and violation of Louisiana unfair trade practices law. In September 2015, the court allowed plaintiff to amend its complaint to allege that HRI and LaGen violated Louisiana antitrust law. Discovery is underway. Plaintiff seeks lost profits from sales of the allegedly converted materials, damages to cover debts arising from Plaintiff's business failure, disgorgement of financial benefits, loss of Plaintiff's business valuation, and treble damages and attorney fees, as well as unspecified equitable relief. HRI answered the complaint denying the allegations. Trial is set for April 2017. Because resolution of the litigation is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of HRI's liability.

*Building Products Matters.* There are litigation and pending and threatened claims made against certain subsidiaries within Headwaters' building products segment, with respect to several products manufactured and sold by its subsidiaries for application by contractors on residential and commercial buildings. The plaintiffs or claimants in these matters typically allege that the structures have suffered damage from water penetration due to some alleged failure of the roofing or wall product. The claims most often involve alleged liabilities associated with certain roofing, stucco, and architectural stone products which are produced and sold by certain subsidiaries of Headwaters.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

Building products litigation and claims typically cite damages for alleged personal injuries, property damage, economic loss, unfair business practices and punitive damages. Claims made against Headwaters and its subsidiaries generally have been paid by their insurers, subject to Headwaters' payment of deductibles or self-insured retentions, although such insurance carriers typically have issued "reservation of rights" letters. There is no guarantee of insurance coverage or continuing coverage. These and future proceedings may result in substantial costs to Headwaters and its subsidiaries, including attorney fees, managerial time and other personnel resources and costs. Adverse resolution of these proceedings could have a materially negative effect on Headwaters' businesses, financial condition, and results of operation, and its ability to meet its financial obligations. Although Headwaters carries general and product liability insurance, subject to exclusions and self-insured retentions, Headwaters cannot assure that such insurance coverage will remain available, that Headwaters' insurance carriers will remain viable, will accept claims or that the insured amounts will cover all claims in excess of self-insured retentions. Future rate increases may also make such insurance uneconomical for Headwaters to maintain. Because resolution of the litigation, claims, and insurance coverage is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of Headwaters' or its subsidiaries' liability.

*Construction Materials Matters.* In addition, there are litigation and pending and threatened claims made against HRI within Headwaters' construction materials segment, with respect to coal combustion products. The plaintiffs or claimants in these matters have alleged that inhalation or other exposure to fly ash is unsafe, and that HRI has failed to warn about the alleged dangers of fly ash exposure and the use of adequate protection, resulting in personal injury, contamination of land and water, and diminution in property value. The *Fentress Family Trust* and *Clary* cases summarized above are examples of these types of claims. The application of relatively novel fly ash claims to insurance policies is complex and uncertain and HRI has had limited success in tendering defense of such claims to insurers, which is dependent upon the alleged facts and specific policy terms. Adverse resolution of these claims and insurance coverage disputes could have a materially negative effect on Headwaters' businesses, financial condition, and results of operation, and its ability to meet its financial obligations. Because resolution of the litigation, claims, and insurance coverage disputes is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of HRI's liability.

*Discontinued Coal Cleaning Operations.* The following litigation relates to the discontinued coal cleaning business:

*RLF Chinook Properties.* In September 2015, RLF Chinook Properties, LLC filed suit in the State of Indiana Circuit Court of Clay against Covol Fuels No. 2, LLC, Headwaters Energy Services Corp., other Covol companies (collectively, "Covol"), as well as BRC Chinook, LLC and other BRC affiliates (collectively, "BRC"). Covol entered into a coal recovery agreement with plaintiff in 2007 with respect to coal at the RLF Chinook site. Covol assigned the coal recovery agreement to BRC in 2013. Plaintiff alleges that BRC has failed to fulfill certain obligations under the coal recovery agreement, including failure to submit reclamation plans to State of Indiana for approval and to restore and reclaim the site per the approved plan. Plaintiff alleges that Covol is liable for the claimed breaches under the coal recovery agreement, and seeks unspecified damages, together with attorney fees and costs. Covol has answered the complaint denying the allegations. Because resolution of the litigation is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of Covol's liability.

*Other.* Headwaters and its subsidiaries are also involved in other legal proceedings that have arisen in the normal course of business. Because resolution of these proceedings is uncertain, legal counsel and management cannot express an opinion as to the ultimate amount, if any, of Headwaters' liability.

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

#### 13. Discontinued Operations

In September 2011, the Board of Directors committed to a plan to sell Headwaters' coal cleaning business, which was part of the energy technology segment. At that time the business met all of the criteria for classification as held for sale and presentation as a discontinued operation. Following the sale of all remaining coal cleaning facilities in January 2013, there are no remaining assets held for sale.

The results of operations for the coal cleaning business have been presented as discontinued operations for all periods presented and certain summarized information for the discontinued business is presented in the following table:

<i>(in thousands)</i>	2014	2015	2016
Gain (loss) from discontinued operations before income taxes	\$ (448)	\$ (725)	\$ 133
Income tax benefit (provision)	33	265	(49)
<b>Income (loss) from discontinued operations, net of income taxes</b>	<b>\$ (415)</b>	<b>\$ (460)</b>	<b>\$ 84</b>

During 2016, certain litigation which commenced prior to disposal of the business was settled favorably to Headwaters, resulting in a gain of approximately \$3.6 million, some of which represents the reversal of an accrual recorded in a prior period. Headwaters sold all of its coal cleaning facilities in 2012 and 2013, and recognized estimated gains on the sales dates. Subsequent to the dates of sale, adjustments of the previously recognized estimated gains on the sales transactions have been recorded and these are included in the amounts in the table above. Headwaters currently expects that additional adjustments to the recognized gains and losses may be recorded in the future as certain contingencies are resolved.

For all sales transactions, a majority of the consideration was in the form of potential production royalties and deferred purchase price, which amounts are dependent upon the buyer's future production levels. Potential future production royalties and deferred purchase price on the sales transactions were not considered as being probable in the original gain calculations and have been accounted for in the periods when such amounts were received. During 2014, Headwaters received approximately \$4.7 million in deferred purchase price payments, royalties and the collection of certain receivables which had been reserved.

In accordance with the terms of the asset purchase agreement for one of the sales transactions, the buyer of the coal cleaning facilities agreed to assume the lease and reclamation obligations related to certain of the facilities. Subsequent to the date of sale, the Headwaters subsidiaries which sold the facilities amended the purchase agreement to provide the buyer with additional time to make payments, as well as fulfill contractual requirements related to the assumed reclamation obligations. One of Headwaters' subsidiaries is performing permit reclamation responsibilities at one site. As of September 30, 2015 and 2016, approximately \$7.4 million and \$9.3 million, respectively, was accrued for this reclamation liability.

Headwaters currently expects to continue to reflect as discontinued operations all activity related to the former coal cleaning business, at least until such time as the significant reclamation obligation is satisfied.

#### 14. Related Party Transactions

In addition to transactions disclosed elsewhere, Headwaters was involved in the following transactions with related parties. A current officer (and former owner) of one of Headwaters' operating subsidiaries made a direct investment of \$500,000 in one of the subsidiary's customers prior to Headwaters acquiring the subsidiary in 2016. The investment remained in place as of September 30, 2016. In addition, also prior to the date of acquisition, the officer deposited \$1,000,000 in a bank account that collateralizes a line of credit used by the customer in its business operations,

## HEADWATERS INCORPORATED

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

which arrangement also existed at September 30, 2016. Sales to that customer in 2016, from the date of acquisition through September 30, 2016, were less than \$0.1 million.

A director of Headwaters, who retired from the Board in 2014, was also a principal in one of the insurance brokerage companies Headwaters uses to purchase certain insurance benefits for its employees. Commissions paid to that company by providers of insurance services to Headwaters totaled approximately \$0.1 million in 2014.

Until December 2013, when the contract was terminated, a majority of one of Headwaters' subsidiary's transportation needs was provided by a company, two of the principals of which are related to an officer of the subsidiary. Costs incurred were approximately \$1.4 million in 2014.

#### **15. Condensed Consolidating Financial Information**

Headwaters' borrowings under the Term Loan Facility (and the 7¼% senior notes until they were fully repaid in September 2016) are jointly and severally, fully and unconditionally guaranteed by Headwaters Incorporated and by substantially all of Headwaters' 100%-owned domestic subsidiaries. Separate stand-alone financial statements and disclosures for Headwaters Incorporated and each of the guarantor subsidiaries are not presented because the guarantees are full and unconditional and the guarantor subsidiaries have joint and several liability.

There are no significant restrictions on the ability of Headwaters Incorporated to obtain funds from the guarantor subsidiaries nor on the ability of the guarantor subsidiaries to obtain funds from Headwaters Incorporated or other guarantor subsidiaries. Non-guaranteeing entities include subsidiaries that are not 100% owned, foreign subsidiaries and joint ventures in which Headwaters has a non-controlling ownership interest.

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING BALANCE SHEET—September 30, 2015

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations and Reclassifications	Headwaters Consolidated
<b>ASSETS</b>					
<b>Current assets:</b>					
Cash and cash equivalents	\$ 25,819	\$ 3,577	\$ 113,201	\$ —	\$ 142,597
Trade receivables, net	129,095	5,289	—	—	134,384
Inventories	52,699	2,375	—	—	55,074
Current income taxes	—	—	143,305	(142,976)	329
Other	10,666	144	1,017	—	11,827
<b>Total current assets</b>	<b>218,279</b>	<b>11,385</b>	<b>257,523</b>	<b>(142,976)</b>	<b>344,211</b>
<b>Property, plant and equipment, net</b>	<b>164,413</b>	<b>9,978</b>	<b>11,327</b>	<b>—</b>	<b>185,718</b>
<b>Other assets:</b>					
Goodwill	147,330	30,869	—	—	178,199
Intangible assets, net	116,479	27,239	—	—	143,718
Investments in subsidiaries	55,844	—	372,864	(428,708)	—
Intercompany accounts and notes	57,793	—	637,046	(694,839)	—
Deferred income taxes	—	25,204	79,763	(12,115)	92,852
Other	11,243	2,291	20,787	—	34,321
<b>Total other assets</b>	<b>388,689</b>	<b>85,603</b>	<b>1,110,460</b>	<b>(1,135,662)</b>	<b>449,090</b>
<b>Total assets</b>	<b>\$ 771,381</b>	<b>\$ 106,966</b>	<b>\$ 1,379,310</b>	<b>\$ (1,278,638)</b>	<b>\$ 979,019</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>					
<b>Current liabilities:</b>					
Accounts payable	\$ 23,619	\$ 1,114	\$ 573	\$ —	\$ 25,306
Accrued personnel costs	14,542	501	37,501	—	52,544
Current income taxes	137,502	5,474	—	(142,976)	—
Other accrued liabilities	39,604	6,380	5,797	—	51,781
Current portion of long-term debt	—	—	4,250	—	4,250
<b>Total current liabilities</b>	<b>215,267</b>	<b>13,469</b>	<b>48,121</b>	<b>(142,976)</b>	<b>133,881</b>
<b>Long-term liabilities:</b>					
Long-term debt, net	—	—	558,080	—	558,080
Intercompany accounts and notes	—	178,179	516,660	(694,839)	—
Other	16,572	13,897	18,422	(12,115)	36,776
<b>Total long-term liabilities</b>	<b>16,572</b>	<b>192,076</b>	<b>1,093,162</b>	<b>(706,954)</b>	<b>594,856</b>
<b>Total liabilities</b>	<b>231,839</b>	<b>205,545</b>	<b>1,141,283</b>	<b>(849,930)</b>	<b>728,737</b>
<b>Redeemable non-controlling interest in consolidated subsidiary</b>	<b>—</b>	<b>12,431</b>	<b>—</b>	<b>—</b>	<b>12,431</b>
<b>Stockholders' equity:</b>					
Common stock	—	—	74	—	74
Capital in excess of par value	486,069	54,470	728,843	(540,715)	728,667
Retained earnings (accumulated deficit)	53,473	(165,480)	(489,889)	112,007	(489,889)
Treasury stock	—	—	(1,001)	—	(1,001)
<b>Total stockholders' equity</b>	<b>539,542</b>	<b>(111,010)</b>	<b>238,027</b>	<b>(428,708)</b>	<b>237,851</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 771,381</b>	<b>\$ 106,966</b>	<b>\$ 1,379,310</b>	<b>\$ (1,278,638)</b>	<b>\$ 979,019</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING BALANCE SHEET—September 30, 2016

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations and Reclassifications	Headwaters Consolidated
<b>ASSETS</b>					
<b>Current assets:</b>					
Cash and cash equivalents	\$ 27,012	\$ 5,304	\$ 32,982	\$ —	\$ 65,298
Trade receivables, net	145,443	6,641	—	—	152,084
Inventories	67,549	5,119	—	—	72,668
Current income taxes	—	—	59,989	(58,802)	1,187
Other	11,975	1,481	61	—	13,517
<b>Total current assets</b>	<b>251,979</b>	<b>18,545</b>	<b>93,032</b>	<b>(58,802)</b>	<b>304,754</b>
<b>Property, plant and equipment, net</b>	<b>179,758</b>	<b>9,852</b>	<b>17,182</b>	<b>—</b>	<b>206,792</b>
<b>Other assets:</b>					
Goodwill	248,016	42,487	—	—	290,503
Intangible assets, net	282,239	36,923	—	—	319,162
Investments in subsidiaries	—	—	721,760	(721,760)	—
Intercompany accounts and notes	26,707	—	701,040	(727,747)	—
Deferred income taxes	—	23,083	57,053	(12,077)	68,059
Other	13,293	10,922	24,958	—	49,173
<b>Total other assets</b>	<b>570,255</b>	<b>113,415</b>	<b>1,504,811</b>	<b>(1,461,584)</b>	<b>726,897</b>
<b>Total assets</b>	<b>\$ 1,001,992</b>	<b>\$ 141,812</b>	<b>\$ 1,615,025</b>	<b>\$ (1,520,386)</b>	<b>\$ 1,238,443</b>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>					
<b>Current liabilities:</b>					
Accounts payable	\$ 27,659	\$ 1,301	\$ 1,251	\$ —	\$ 30,211
Accrued personnel costs	14,945	519	29,902	—	45,366
Current income taxes	56,553	2,249	—	(58,802)	—
Other accrued liabilities	55,942	5,002	2,841	—	63,785
Current portion of long-term debt	—	—	7,785	—	7,785
<b>Total current liabilities</b>	<b>155,099</b>	<b>9,071</b>	<b>41,779</b>	<b>(58,802)</b>	<b>147,147</b>
<b>Long-term liabilities:</b>					
Long-term debt, net	—	—	746,716	—	746,716
Income taxes	12,077	—	—	(12,077)	—
Intercompany accounts and notes	—	211,087	516,660	(727,747)	—
Other	4,581	16,941	19,708	—	41,230
<b>Total long-term liabilities</b>	<b>16,658</b>	<b>228,028</b>	<b>1,283,084</b>	<b>(739,824)</b>	<b>787,946</b>
<b>Total liabilities</b>	<b>171,757</b>	<b>237,099</b>	<b>1,324,863</b>	<b>(798,626)</b>	<b>935,093</b>
<b>Redeemable non-controlling interest in consolidated subsidiary</b>	<b>—</b>	<b>13,363</b>	<b>—</b>	<b>—</b>	<b>13,363</b>
<b>Stockholders' equity:</b>					
Common stock	—	—	74	—	74
Capital in excess of par value	711,755	52,429	733,292	(764,359)	733,117
Retained earnings (accumulated deficit)	118,480	(161,079)	(441,793)	42,599	(441,793)
Treasury stock	—	—	(1,411)	—	(1,411)
<b>Total stockholders' equity</b>	<b>830,235</b>	<b>(108,650)</b>	<b>290,162</b>	<b>(721,760)</b>	<b>289,987</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 1,001,992</b>	<b>\$ 141,812</b>	<b>\$ 1,615,025</b>	<b>\$ (1,520,386)</b>	<b>\$ 1,238,443</b>



HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF INCOME

Year Ended September 30, 2014

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Revenue:</b>					
Building products	\$ 438,473	\$ 33,961	\$ —	\$ —	\$ 472,434
Construction materials	309,337	—	—	—	309,337
Energy technology	9,676	—	—	—	9,676
<b>Total revenue</b>	<b>757,486</b>	<b>33,961</b>	<b>—</b>	<b>—</b>	<b>791,447</b>
<b>Cost of revenue:</b>					
Building products	312,220	24,063	—	—	336,283
Construction materials	224,888	—	—	—	224,888
Energy technology	4,583	—	—	—	4,583
<b>Total cost of revenue</b>	<b>541,691</b>	<b>24,063</b>	<b>—</b>	<b>—</b>	<b>565,754</b>
<b>Gross profit</b>	<b>215,795</b>	<b>9,898</b>	<b>—</b>	<b>—</b>	<b>225,693</b>
<b>Operating expenses:</b>					
Selling, general and administrative	108,602	4,209	24,839	—	137,650
Amortization	20,231	1,088	—	—	21,319
<b>Total operating expenses</b>	<b>128,833</b>	<b>5,297</b>	<b>24,839</b>	<b>—</b>	<b>158,969</b>
<b>Operating income (loss)</b>	<b>86,962</b>	<b>4,601</b>	<b>(24,839)</b>	<b>—</b>	<b>66,724</b>
<b>Other income (expense):</b>					
Net interest expense	(349)	(2)	(45,978)	—	(46,329)
Intercompany interest income (expense)	(22,737)	—	22,737	—	—
Equity in earnings of subsidiaries	—	—	62,719	(62,719)	—
Other, net	(24)	(324)	—	—	(348)
<b>Total other income (expense), net</b>	<b>(23,110)</b>	<b>(326)</b>	<b>39,478</b>	<b>(62,719)</b>	<b>(46,677)</b>
<b>Income from continuing operations before income taxes</b>	<b>63,852</b>	<b>4,275</b>	<b>14,639</b>	<b>(62,719)</b>	<b>20,047</b>
Income tax benefit (provision)	(3,296)	(923)	645	—	(3,574)
<b>Income from continuing operations</b>	<b>60,556</b>	<b>3,352</b>	<b>15,284</b>	<b>(62,719)</b>	<b>16,473</b>
Loss from discontinued operations, net of income taxes	(415)	—	—	—	(415)
<b>Net income</b>	<b>60,141</b>	<b>3,352</b>	<b>15,284</b>	<b>(62,719)</b>	<b>16,058</b>
Net income attributable to non-controlling interest	—	(774)	—	—	(774)
<b>Net income attributable to Headwaters Incorporated</b>	<b>\$ 60,141</b>	<b>\$ 2,578</b>	<b>\$ 15,284</b>	<b>\$ (62,719)</b>	<b>\$ 15,284</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF INCOME

Year Ended September 30, 2015

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Revenue:</b>					
Building products	\$ 479,338	\$ 44,305	\$ —	\$ —	\$ 523,643
Construction materials	352,263	—	—	—	352,263
Energy technology	19,427	—	—	—	19,427
<b>Total revenue</b>	<b>851,028</b>	<b>44,305</b>	<b>—</b>	<b>—</b>	<b>895,333</b>
<b>Cost of revenue:</b>					
Building products	335,516	31,647	—	—	367,163
Construction materials	249,077	—	—	—	249,077
Energy technology	9,202	—	—	—	9,202
<b>Total cost of revenue</b>	<b>593,795</b>	<b>31,647</b>	<b>—</b>	<b>—</b>	<b>625,442</b>
<b>Gross profit</b>	<b>257,233</b>	<b>12,658</b>	<b>—</b>	<b>—</b>	<b>269,891</b>
<b>Operating expenses:</b>					
Selling, general and administrative	115,423	6,174	28,026	—	149,623
Amortization	16,688	1,473	—	—	18,161
<b>Total operating expenses</b>	<b>132,111</b>	<b>7,647</b>	<b>28,026</b>	<b>—</b>	<b>167,784</b>
<b>Operating income (loss)</b>	<b>125,122</b>	<b>5,011</b>	<b>(28,026)</b>	<b>—</b>	<b>102,107</b>
<b>Other income (expense):</b>					
Net interest expense	(205)	—	(64,014)	—	(64,219)
Intercompany interest income (expense)	(23,782)	(280)	24,062	—	—
Equity in earnings of subsidiaries	—	—	54,350	(54,350)	—
Other, net	(56)	(162)	—	—	(218)
<b>Total other income (expense), net</b>	<b>(24,043)</b>	<b>(442)</b>	<b>14,398</b>	<b>(54,350)</b>	<b>(64,437)</b>
<b>Income (loss) from continuing operations before income taxes</b>	<b>101,079</b>	<b>4,569</b>	<b>(13,628)</b>	<b>(54,350)</b>	<b>37,670</b>
Income tax benefit (provision)	(48,213)	(1,756)	144,427	—	94,458
<b>Income from continuing operations</b>	<b>52,866</b>	<b>2,813</b>	<b>130,799</b>	<b>(54,350)</b>	<b>132,128</b>
Loss from discontinued operations, net of income taxes	(67)	(393)	—	—	(460)
<b>Net income</b>	<b>52,799</b>	<b>2,420</b>	<b>130,799</b>	<b>(54,350)</b>	<b>131,668</b>
Net income attributable to non-controlling interest	—	(869)	—	—	(869)
<b>Net income attributable to Headwaters Incorporated</b>	<b>\$ 52,799</b>	<b>\$ 1,551</b>	<b>\$ 130,799</b>	<b>\$ (54,350)</b>	<b>\$ 130,799</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF INCOME

Year Ended September 30, 2016

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Revenue:</b>					
Building products	\$ 538,210	\$ 56,071	\$ —	\$ —	\$ 594,281
Construction materials	370,439	—	—	—	370,439
Energy technology	10,087	—	—	—	10,087
<b>Total revenue</b>	<b>918,736</b>	<b>56,071</b>	<b>—</b>	<b>—</b>	<b>974,807</b>
<b>Cost of revenue:</b>					
Building products	381,998	41,912	—	—	423,910
Construction materials	258,478	—	—	—	258,478
Energy technology	4,218	—	—	—	4,218
<b>Total cost of revenue</b>	<b>644,694</b>	<b>41,912</b>	<b>—</b>	<b>—</b>	<b>686,606</b>
<b>Gross profit</b>	<b>274,042</b>	<b>14,159</b>	<b>—</b>	<b>—</b>	<b>288,201</b>
<b>Operating expenses:</b>					
Selling, general and administrative	119,702	8,956	28,240	—	156,898
Amortization	19,120	1,473	—	—	20,593
<b>Total operating expenses</b>	<b>138,822</b>	<b>10,429</b>	<b>28,240</b>	<b>—</b>	<b>177,491</b>
<b>Operating income (loss)</b>	<b>135,220</b>	<b>3,730</b>	<b>(28,240)</b>	<b>—</b>	<b>110,710</b>
<b>Other income (expense):</b>					
Net interest expense	(306)	(35)	(42,083)	—	(42,424)
Intercompany interest income (expense)	(27,998)	—	27,998	—	—
Equity in earnings of subsidiaries	—	—	69,408	(69,408)	—
Other, net	(434)	4,583	—	—	4,149
<b>Total other income (expense), net</b>	<b>(28,738)</b>	<b>4,548</b>	<b>55,323</b>	<b>(69,408)</b>	<b>(38,275)</b>
<b>Income from continuing operations before income taxes</b>					
	<b>106,482</b>	<b>8,278</b>	<b>27,083</b>	<b>(69,408)</b>	<b>72,435</b>
Income tax benefit (provision)	(41,371)	(2,398)	21,013	—	(22,756)
<b>Income from continuing operations</b>	<b>65,111</b>	<b>5,880</b>	<b>48,096</b>	<b>(69,408)</b>	<b>49,679</b>
Income from discontinued operations, net of income taxes	—	84	—	—	84
<b>Net income</b>	<b>65,111</b>	<b>5,964</b>	<b>48,096</b>	<b>(69,408)</b>	<b>49,763</b>
Net income attributable to non-controlling interest	—	(1,667)	—	—	(1,667)
<b>Net income attributable to Headwaters Incorporated</b>	<b>\$ 65,111</b>	<b>\$ 4,297</b>	<b>\$ 48,096</b>	<b>\$ (69,408)</b>	<b>\$ 48,096</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS

Year Ended September 30, 2014

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- Guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Cash flows from operating activities:</b>					
Net income	\$ 60,141	\$ 3,352	\$ 15,284	\$ (62,719)	\$ 16,058
Adjustments to reconcile net income to net cash provided by (used in) operating activities:					
Depreciation and amortization	52,716	2,146	272	—	55,134
Interest expense related to amortization of debt issue costs and debt discount	—	—	2,175	—	2,175
Stock-based compensation	843	—	1,322	—	2,165
Deferred income taxes	1,062	604	—	—	1,666
Net loss on disposition of property, plant and equipment	44	6	45	—	95
Asset impairments	1,815	—	—	—	1,815
Net loss of unconsolidated joint ventures	—	529	—	—	529
Equity in earnings of subsidiaries	—	—	(62,719)	62,719	0
Decrease (increase) in trade receivables	(90)	607	—	—	517
Decrease (increase) in inventories	(3,927)	1,580	—	—	(2,347)
Increase (decrease) in accounts payable and accrued liabilities	(16,725)	828	3,311	—	(12,586)
Other changes in operating assets and liabilities, net	34,649	129	(34,956)	—	(178)
<b>Net cash provided by (used in) operating activities</b>	<b>130,528</b>	<b>9,781</b>	<b>(75,266)</b>	<b>—</b>	<b>65,043</b>
<b>Cash flows from investing activities:</b>					
Business acquisitions	(10,500)	—	(85,104)	—	(95,604)
Investments in unconsolidated joint ventures	—	(1,875)	—	—	(1,875)
Purchase of property, plant and equipment	(30,672)	(829)	(4,298)	—	(35,799)
Proceeds from disposition of property, plant and equipment	905	—	—	—	905
Net decrease in long-term receivables and deposits	7,145	—	300	—	7,445
Net change in other assets	(2,275)	—	719	—	(1,556)
<b>Net cash used in investing activities</b>	<b>(35,397)</b>	<b>(2,704)</b>	<b>(88,383)</b>	<b>—</b>	<b>(126,484)</b>
<b>Cash flows from financing activities:</b>					
Net proceeds from issuance of long-term debt	—	—	146,650	—	146,650
Payments on long-term debt	—	—	(7,792)	—	(7,792)
Dividends paid to non-controlling interest in consolidated subsidiary	—	(950)	—	—	(950)
Employee stock purchases	580	—	179	—	759
Intercompany transfers	(132,872)	(397)	133,269	—	0
<b>Net cash provided by (used in) financing activities</b>	<b>(132,292)</b>	<b>(1,347)</b>	<b>272,306</b>	<b>—</b>	<b>138,667</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(37,161)</b>	<b>5,730</b>	<b>108,657</b>	<b>—</b>	<b>77,226</b>
Cash and cash equivalents, beginning of year	70,713	34	4,569	—	75,316
<b>Cash and cash equivalents, end of year</b>	<b>\$ 33,552</b>	<b>\$ 5,764</b>	<b>\$ 113,226</b>	<b>\$ —</b>	<b>\$ 152,542</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS

Year Ended September 30, 2015

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Cash flows from operating activities:</b>					
Net income	\$ 52,799	\$ 2,420	\$ 130,799	\$ (54,350)	\$ 131,668
Adjustments to reconcile net income to net cash provided by (used in) operating activities:					—
Depreciation and amortization	50,538	2,922	513	—	53,973
Interest expense related to amortization of debt issue costs and debt discount	—	—	6,180	—	6,180
Debt pre-payment premiums	—	—	18,320	—	18,320
Stock-based compensation	1,014	—	1,812	—	2,826
Deferred income taxes	7,850	(25,808)	(78,784)	—	(96,742)
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	—	(965)	(578)	—	(1,543)
Net loss (gain) on disposition of property, plant and equipment	(70)	119	—	—	49
Net loss of unconsolidated joint ventures	—	262	—	—	262
Equity in earnings of subsidiaries	—	—	(54,350)	54,350	0
Decrease (increase) in trade receivables	(14,295)	101	—	—	(14,194)
Increase in inventories	(783)	(224)	—	—	(1,007)
Increase (decrease) in accounts payable and accrued liabilities	(2,147)	3,519	(12,929)	—	(11,557)
Other changes in operating assets and liabilities, net	41,952	18,016	(66,495)	—	(6,527)
<b>Net cash provided by (used in) operating activities</b>	<b>136,858</b>	<b>362</b>	<b>(55,512)</b>	<b>—</b>	<b>81,708</b>
<b>Cash flows from investing activities:</b>					
Business acquisition	(5,650)	—	—	—	(5,650)
Investments in unconsolidated joint venture	(125)	—	—	—	(125)
Purchase of property, plant and equipment	(30,972)	(662)	(5,225)	—	(36,859)
Proceeds from disposition of property, plant and equipment	906	9	—	—	915
Net decrease in long-term receivables and deposits	2,382	—	1,068	—	3,450
Net change in other assets	(718)	—	121	—	(597)
<b>Net cash used in investing activities</b>	<b>(34,177)</b>	<b>(653)</b>	<b>(4,036)</b>	<b>—</b>	<b>(38,866)</b>
<b>Cash flows from financing activities:</b>					
Net proceeds from issuance of long-term debt	—	—	414,675	—	414,675
Payments on long-term debt	—	—	(449,799)	—	(449,799)
Debt pre-payment premiums	—	—	(18,320)	—	(18,320)
Dividends paid to non-controlling interest in consolidated subsidiary	—	(1,690)	—	—	(1,690)
Employee stock purchases	583	45	176	—	804
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	—	965	578	—	1,543
Intercompany transfers	(110,997)	(1,216)	112,213	—	0
<b>Net cash provided by (used in) financing activities</b>	<b>(110,414)</b>	<b>(1,896)</b>	<b>59,523</b>	<b>—</b>	<b>(52,787)</b>
<b>Net decrease in cash and cash equivalents</b>	<b>(7,733)</b>	<b>(2,187)</b>	<b>(25)</b>	<b>—</b>	<b>(9,945)</b>
Cash and cash equivalents, beginning of year	33,552	5,764	113,226	—	152,542
<b>Cash and cash equivalents, end of year</b>	<b>\$ 25,819</b>	<b>\$ 3,577</b>	<b>\$ 113,201</b>	<b>\$ —</b>	<b>\$ 142,597</b>

HEADWATERS INCORPORATED

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

September 30, 2016

CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS  
Year Ended September 30, 2016

<i>(in thousands)</i>	Guarantor Subsidiaries	Non- guarantor Subsidiaries	Parent Company	Eliminations	Headwaters Consolidated
<b>Cash flows from operating activities:</b>					
Net income	\$ 65,111	\$ 5,964	\$ 48,096	\$ (69,408)	\$ 49,763
Adjustments to reconcile net income to net cash provided by (used in) operating activities:					
Depreciation and amortization	57,972	3,042	1,504	—	62,518
Interest expense related to amortization of debt issue costs and debt discount	—	—	3,973	—	3,973
Debt pre-payment premiums	—	—	5,395	—	5,395
Stock-based compensation	1,075	7	2,099	—	3,181
Deferred income taxes	(40)	121	22,698	—	22,779
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	(367)	—	(356)	—	(723)
Net loss (gain) on disposition of property, plant and equipment	(1,543)	67	—	—	(1,476)
Gain on acquired assets held for sale	—	(4,450)	—	—	(4,450)
Change in fair value of contingent consideration	(800)	—	—	—	(800)
Net loss of unconsolidated joint ventures	—	43	—	—	43
Equity in earnings of subsidiaries	—	—	(69,408)	69,408	0
Increase in trade receivables	(1,068)	(34)	—	—	(1,102)
Increase in inventories	(68)	(364)	—	—	(432)
Increase (decrease) in accounts payable and accrued liabilities	1,046	(2,578)	(9,921)	—	(11,453)
Other changes in operating assets and liabilities, net	9,046	(2,370)	(13,589)	—	(6,913)
<b>Net cash provided by (used in) operating activities</b>	<b>130,364</b>	<b>(552)</b>	<b>(9,509)</b>	<b>—</b>	<b>120,303</b>
<b>Cash flows from investing activities:</b>					
Business acquisitions, net of cash acquired	(309,279)	(33,083)	—	—	(342,362)
Purchase of property, plant and equipment	(44,871)	(871)	(7,357)	—	(53,099)
Proceeds from disposition of property, plant and equipment	9,425	20	—	—	9,445
Proceeds from sale of acquired assets held for sale	—	6,200	—	—	6,200
Net decrease (increase) in long-term receivables and deposits	534	(76)	(185)	—	273
Net change in other assets	(1,348)	(140)	(355)	—	(1,843)
<b>Net cash used in investing activities</b>	<b>(345,539)</b>	<b>(27,950)</b>	<b>(7,897)</b>	<b>—</b>	<b>(381,386)</b>
<b>Cash flows from financing activities:</b>					
Net proceeds from issuance of long-term debt	—	—	343,453	—	343,453
Payments on long-term debt	—	—	(155,135)	—	(155,135)
Debt pre-payment premiums	—	—	(5,395)	—	(5,395)
Dividends paid to non-controlling interest in consolidated subsidiary	(775)	40	—	—	(735)
Employee stock purchases	1,394	(735)	214	—	873
Tax benefit from exercise of stock appreciation rights and vesting of restricted stock	367	—	356	—	723
Intercompany transfers	215,382	30,924	(246,306)	—	0
<b>Net cash provided by (used in) financing activities</b>	<b>216,368</b>	<b>30,229</b>	<b>(62,813)</b>	<b>—</b>	<b>183,784</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>1,193</b>	<b>1,727</b>	<b>(80,219)</b>	<b>—</b>	<b>(77,299)</b>
Cash and cash equivalents, beginning of year	25,819	3,577	113,201	—	142,597
<b>Cash and cash equivalents, end of year</b>	<b>\$ 27,012</b>	<b>\$ 5,304</b>	<b>\$ 32,982</b>	<b>\$ —</b>	<b>\$ 65,298</b>

**HEADWATERS INCORPORATED**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)**

**September 30, 2016**

**16. Quarterly Financial Data (unaudited)**

Summarized unaudited quarterly financial data for 2015 and 2016 is as follows.

<i>(in thousands, except per-share amounts)</i>	<b>2015(1)(2)</b>				
	<b>First quarter</b>	<b>Second quarter</b>	<b>Third quarter</b>	<b>Fourth quarter</b>	<b>Full year</b>
Net revenue	\$ 199,597	\$ 179,725	\$ 243,294	\$ 272,717	\$ 895,333
Gross profit	55,687	47,141	76,762	90,301	269,891
Net income (loss) (3)(4)	7,084	(25,198)	23,008	126,774	131,668
Basic earnings (loss) per share (5)	0.09	(0.34)	0.30	1.72	1.78
Diluted earnings (loss) per share (5)	0.09	(0.34)	0.30	1.68	1.73

<i>(in thousands, except per-share amounts)</i>	<b>2016(1)(2)</b>				
	<b>First quarter</b>	<b>Second quarter</b>	<b>Third quarter</b>	<b>Fourth quarter</b>	<b>Full year</b>
Net revenue	\$ 218,418	\$ 202,332	\$ 262,466	\$ 291,591	\$ 974,807
Gross profit	64,271	54,877	83,531	85,522	288,201
Net income (4)	12,721	2,384	17,785	16,873	49,763
Basic earnings per share (5)	0.17	0.03	0.23	0.21	0.65
Diluted earnings per share (5)	0.17	0.03	0.23	0.21	0.64

- (1) Headwaters' revenue is seasonal, typically with higher revenues in the third and fourth quarters of the fiscal year than in the first and second quarters. As a result, profitability is also usually higher in the last half of the fiscal year than in the first half of the year.
- (2) As described in Note 4, Headwaters acquired several businesses during 2015 and 2016 and these acquisitions have affected to a certain extent the comparability of the above information.
- (3) As described in Note 9, through the June 2015 quarter, Headwaters recorded a full valuation allowance on its net amortizable deferred tax assets and recorded income tax expense due to the combination of recognizing benefit for deferred tax assets only to the extent of projected fiscal year earnings, plus state income taxes in certain state jurisdictions. In the September 2015 quarter, Headwaters released a majority of the valuation allowance on NOL and tax credit carryforwards and certain other deferred tax assets. Approximately \$96.8 million of the release represents a non-routine income tax benefit, which when combined with the 2015 utilization of \$12.5 million, resulted in a total change in the valuation allowance of \$109.3 million recorded in the year.
- (4) As described in Note 7, Headwaters incurred approximately \$24.8 million of non-routine extinguishment loss related to early repayments of debt in the March 2015 quarter and \$8.7 million of non-routine extinguishment loss and non-capitalizable debt issuance costs in the September 2016 quarter.
- (5) In accordance with ASC Topic 260 Earnings Per Share, EPS is computed independently for each of the four quarters in a fiscal year. The basic and diluted EPS computed for certain years may not equal the sum of the four quarterly computations due to the combination of profitable quarters and loss quarters and / or rounding conventions.



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