ARCH COAL INC
Form 10-K
March 15, 2016
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

Form 10-K

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

For the fiscal year ended December 31, 2015

or

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

Commission file number: 1-13105

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**43-0921172**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)
One CityPlace Drive, Ste. 300, St. Louis, Missouri	**63141**
(Address of principal executive offices)	(Zip code)

Registrant s telephone number, including area code: **(314) 994-2700**

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $.01 par value	OTC Pink

Securities registered pursuant to Section 12(g) of the Act: None

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

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 o No x

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 x No o

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 (232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such filed). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (229.405 of this chapter) 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. o

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

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

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

The aggregate market value of the voting stock held by non-affiliates of the registrant (excluding outstanding shares beneficially owned by directors, officers, other affiliates and treasury shares) as of **June 30, 2015** was approximately $72.4 million.

At February 12, 2016 there were 21,446,233 shares of the registrant s common stock outstanding.

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If you are not familiar with any of the mining terms used in this report, we have provided explanations of many of them under the caption Glossary of Selected Mining Terms on page 36 of this report. Unless the context otherwise requires, all references in this report to Arch, we, us, or our are to Arch Coal, Inc. and its subsidiaries.

CAUTIONARY STATEMENTS REGARDING FORWARD-LOOKING INFORMATION

This report contains forward-looking statements, within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, such as our expected future business and financial performance, and are intended to come within the safe harbor protections provided by those sections. The words anticipates, believes, could, estimates, expects, intends, may, predicts, projects, seeks, should, will or other comparable words and phrases identify forward-looking statements, which speak only as of the date of this report. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. Actual results may vary significantly from those anticipated due to many factors, including:

- our ability to continue as a going concern;
- our ability to successfully complete a reorganization under Chapter 11 and emerge from bankruptcy;
- potential adverse effects of the Chapter 11 Cases (as defined below) on our liquidity and results of operations;
- our ability to obtain timely Bankruptcy Court approval with respect to motions filed in the Chapter 11 Cases;
- objections to the Company s plan of reorganization that could protract the Chapter 11 Cases;
- employee attrition and our ability to retain senior management and key personnel due to the distractions and uncertainties, including our ability to provide adequate compensation and benefits during the Chapter 11 Cases;
- market demand for coal and electricity;
- geologic conditions, weather and other inherent risks of coal mining that are beyond our control;

- competition, both within our industry and with producers of competing energy sources;
- excess production and production capacity;
- our ability to acquire or develop coal reserves in an economically feasible manner;
- inaccuracies in our estimates of our coal reserves;
- availability and price of mining and other industrial supplies;
- availability of skilled employees and other workforce factors;
- disruptions in the quantities of coal produced by our contract mine operators;
- our ability to collect payments from our customers;
- defects in title or the loss of a leasehold interest;
- railroad, barge, truck and other transportation performance and costs;
- our ability to successfully integrate the operations that we acquire;

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- our ability to secure new coal supply arrangements or to renew existing coal supply arrangements;
- our relationships with, and other conditions affecting our customers;
- the deferral of contracted shipments of coal by our customers;
- our ability to service our outstanding indebtedness;
- our ability to comply with the restrictions imposed by our DIP Credit Agreement, our Securitization Facility and other financing arrangements;
- the availability and cost of surety bonds;
- our ability to manage the market and other risks associated with certain trading and other asset optimization strategies;
- terrorist attacks, military action or war;
- our ability to obtain and renew various permits, including permits authorizing the disposition of certain mining waste;
- existing and future legislation and regulations affecting both our coal mining operations and our customers coal usage, governmental policies and taxes, including those aimed at reducing emissions of elements such as mercury, sulfur dioxides, nitrogen oxides, particulate matter or greenhouse gases;
- the accuracy of our estimates of reclamation and other mine closure obligations;

- the existence of hazardous substances or other environmental contamination on property owned or used by us; and

- other factors, including those discussed in Legal Proceedings , set forth in Item 3 of this report and Risk Factors, set forth in Item 1A of this report.

All forward-looking statements in this report, as well as all other written and oral forward-looking statements attributable to us or persons acting on our behalf, are expressly qualified in their entirety by the cautionary statements contained in this section and elsewhere in this report. These factors are not necessarily all of the important factors that could affect us. These risks and uncertainties, as well as other risks of which we are not aware or which we currently do not believe to be material, may cause our actual future results to be materially different than those expressed in our forward-looking statements. These forward-looking statements speak only as of the date on which such statements were made, and we do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by the federal securities laws.

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PART I

ITEM 1. BUSINESS

Introduction

We are one of the world s largest coal producers. For the year ended December 31, 2015, we sold approximately 128 million tons of coal, including approximately 1.4 million tons of coal we purchased from third parties. We sell substantially all of our coal to power plants, steel mills and industrial facilities. At December 31, 2015, we operated, or contracted out the operation of, 16 active mines located in each of the major coal-producing regions of the United States. The locations of our mines and access to export facilities enable us to ship coal worldwide.

Our History

We were organized in Delaware in 1969 as Arch Mineral Corporation. In July 1997, we merged with Ashland Coal, Inc., a subsidiary of Ashland Inc. that was formed in 1975. As a result of the merger, we became one of the largest producers of low-sulfur coal in the eastern United States.

In June 1998, we expanded into the western United States when we acquired the coal assets of Atlantic Richfield Company. This acquisition included the Black Thunder and Coal Creek mines in the Powder River Basin of Wyoming, the West Elk mine in Colorado and a 65% interest in Canyon Fuel Company, which operated three mines in Utah. In October 1998, we acquired a leasehold interest in the Thundercloud reserve, a 412-million-ton federal reserve tract adjacent to the Black Thunder mine.

In July 2004, we acquired the remaining 35% interest in Canyon Fuel Company. In August 2004, we acquired Triton Coal Company s North Rochelle mine adjacent to our Black Thunder operation. In September 2004, we acquired a leasehold interest in the Little Thunder reserve, a 719-million-ton federal reserve tract adjacent to the Black Thunder mine.

In December 2005, we sold the stock of Hobet Mining, Inc., Apogee Coal Company and Catenary Coal Company and their four associated mining complexes (Hobet 21, Arch of West Virginia, Samples and Campbells Creek) and approximately 455 million tons of coal reserves in Central Appalachia to Magnum Coal Company, which was subsequently acquired by Patriot Coal Corporation.

In October 2009, we acquired Rio Tinto s Jacobs Ranch mine complex in the Powder River Basin of Wyoming, which included 345 million tons of low-cost, low-sulfur coal reserves, and integrated it into the Black Thunder mine.

In June 2011, we acquired International Coal Group, Inc., which owned and operated mines primarily in the Appalachian Region of the United States.

In August 2013, we sold the equity interests of Canyon Fuel Company, LLC (Canyon Fuel), which owned and operated our Utah operations.

Filing Under Chapter 11 of the United States Bankruptcy Code

On January 11, 2016 (the Petition Date), Arch and substantially all of Arch s wholly owned domestic subsidiaries (the Filing Subsidiaries and, together with Arch, the Debtors) filed voluntary petitions for reorganization (collectively, the Bankruptcy Petitions) under Chapter 11 of Title 11 of the U.S. Code (the Bankruptcy Code) in the United States Bankruptcy Court for the Eastern District of Missouri (the Court). The Debtor s Chapter 11 Cases (collectively, the Chapter 11 Cases) are being jointly administered under the caption *In re Arch Coal, Inc., et al.* Case No. 16-40120 (lead case). Each Debtor will continue to operate its business as a debtor in possession under the jurisdiction of the Court and in accordance with the applicable provisions of the Bankruptcy Code and the orders of the Court.

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The filing of the Bankruptcy Petitions constituted an event of default that accelerated Arch s obligations under the documents governing each of Arch s 7.00% senior notes due 2019, 9.875% senior notes due 2019, 8.00% senior secured second lien notes due 2019, 7.25% senior notes due 2020, 7.25% senior notes due 2021 (together, the senior notes) and senior secured first lien term loan due 2018 (the Existing Credit Agreement) (collectively with the senior notes, the Debt Instruments), all as further described in Note 14, Debt and Financing Arrangements to the Consolidated Financial Statements included in the Form 10-K. Immediately after filing the Bankruptcy Petitions, Arch began notifying all known current or potential creditors of the Debtors of the bankruptcy filings.

Additionally, on the Petition Date, the New York Stock Exchange (the NYSE) determined that Arch was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards, and trading in the Company s common stock was suspended on January 11, 2016. We expect that the existing common stock of the Company will be extinguished upon the Company s emergence from Chapter 11 and existing equity holders will not receive consideration in respect of their equity interests.

On the Petition Date, the Debtors filed a number of motions with the Court generally designed to stabilize their operations and facilitate the Debtors transition into Chapter 11. Certain of these motions sought authority from the Court for the Debtors to make payments upon, or otherwise honor, certain pre-petition obligations (e.g., obligations related to certain employee wages, salaries and benefits and certain vendors and other providers essential to the Debtors businesses). The Court has entered orders approving the relief sought in these motions.

Pursuant to Section 362 of the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property. Subject to certain exceptions under the Bankruptcy Code, the filing of the Debtors Chapter 11 Cases also automatically stayed the continuation of most legal proceedings, including certain of the third party litigation matters described under Legal Proceedings, or the filing of other actions against or on behalf of the Debtors or their property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of the Debtors bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim. Notwithstanding the general application of the automatic stay described above, governmental authorities may determine to continue actions brought under their police and regulatory powers.

As required by the Bankruptcy Code, the U.S. Trustee for the Eastern District of Missouri appointed an official committee of unsecured creditors (the Creditors Committee) on January 25, 2016. The Creditors Committee represents all unsecured creditors of the Debtors and has a right to be heard on all matters that come before the Court.

As a result of extremely challenging current market conditions, Arch believes it will require a significant restructuring of its balance sheet in order to continue as a going concern in the long term. The Company s ability to continue as a going concern is dependent upon, among other things, its ability to become profitable and maintain profitability and its ability to successfully implement its Chapter 11 plan strategy. As a result of the Bankruptcy Petitions, the realization of the Debtors assets and the satisfaction of liabilities are subject to significant uncertainty. While operating as a debtor-in-possession pursuant to the Bankruptcy Code, the Company may sell or otherwise dispose of or liquidate assets or settle liabilities, subject to the approval of the Court or as otherwise permitted in the ordinary course of business for amounts other than those reflected in the accompanying consolidated financial statements. Further, a Chapter 11 plan is likely to materially change the amounts and classifications of assets and liabilities reported in the Company s Consolidated Financial Statements.

Restructuring Support Agreement

In connection with the filing of the Bankruptcy Petitions, Arch entered into a Restructuring Support Agreement, dated as of January 10, 2016 (the Restructuring Support Agreement), among the Debtors and holders of over 50% of Arch s first lien term loans under Arch s Existing Credit Agreement (the Supporting First Lien Creditors), providing that the Supporting First Lien Creditors will support a restructuring of the Debtors, subject to the following terms and conditions contemplated therein, among others:

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- existing common stock of Arch would likely be extinguished upon the Company s emergence from Chapter 11, and existing equity holders would likely not receive consideration in respect of their equity interests;

- claims against the Debtors arising under the DIP Facility (as defined below) would be paid in full in cash or receive such other treatment as may be consented to by the holders of such claims;

- claims against the Debtors of holders of first lien term loans would be exchanged for (a) a combination of cash and $326.5 million (principal amount) of new first lien debt that would be issued by the reorganized Company and (b) 100% of the common stock of the reorganized Company outstanding on the effective date of the plan, subject to dilution on account of a proposed new management incentive plan and the distribution to unsecured creditors of any new common stock and warrants (as described below);

- first lien term loan deficiency claims (subject to certain exceptions) as well as second lien notes, unsecured notes and general unsecured claims against the Debtors would be exchanged for either (1) common stock in the reorganized Company and warrants or (2) the value of the unencumbered assets of the Company, if any, after giving effect to certain other payments and claims;

- either the Company s existing accounts receivable securitization facility would be reinstated or a new letter of credit facility would be entered into by the Company, in either case on terms acceptable to Supporting First Lien Creditors holding more than 66 2/3% of the aggregate amount of the first lien term loans held by Supporting First Lien Creditors; and

- the board of directors of the reorganized Company would consist of seven directors, at least one of whom would be independent, including the Company s Chief Executive Officer and six directors selected by certain of the Company s first-lien term lenders in consultation with the Company s Chief Executive Officer.

The Restructuring Support Agreement, if utilized as the basis for a plan of reorganization, is expected to reduce Arch s long-term debt by more than $4.5 billion.

We entered into an amendment to the Restructuring Support Agreement on February 25, 2016 (the RSA Amendment), which provides for the waiver of the termination event that would have occurred on February 25, 2016 as a result of the Debtors not having obtained Court approval of the assumption of the Restructuring Support Agreement within 45 days of the Petition Date. The Debtors had previously agreed, with the consent of the Majority Consenting Lenders under the Restructuring Support Agreement, to adjourn the Court hearing on the Restructuring Support Agreement at the request of the official committee of unsecured creditors appointed in the Debtors Chapter 11 cases. Pursuant to the RSA Amendment, unless otherwise agreed by the Majority Consenting Lenders, the Debtors are required to obtain Court approval of the assumption of the Restructuring Support Agreement on or before the date that is 90 days from the Petition Date.

The RSA Amendment also provides for a waiver of any termination event that otherwise would occur as a result of the dismissal of the Chapter 11 case of one of our subsidiaries following the sale of such subsidiary and a 45-day extension of the date after which the Debtors and the Majority Consenting Lenders may modify the proposed distributions to holders of unsecured claims if holders of more than $1.6125 billion of unsecured claims against the Debtors have not executed a restructuring support agreement substantially in the form of the Restructuring Support Agreement.

Securitization Agreement

On January 13, 2016, Arch and its securitization financing providers (the Securitization Financing Providers) agreed that, subject to certain amendments (the Amendments), they will continue the $200 million trade accounts receivable securitization facility provided to Arch Receivable Company, LLC, a non-debtor special-purpose entity that is a wholly owned subsidiary of the Company (Arch Receivable) (the Securitization Facility). See Item 7, Management s Discussion and Analysis Liquidity and Capital Resources Securitization Agreement for more information.

Debtor-In-Possession Financing

On January 21, 2016, the Superpriority Secured Debtor-in-Possession Credit Agreement, as amended by the Waiver and Consent and Amendment No. 1, dated as of March 4, 2016, (the DIP Credit Agreement) was entered into by and among the Company, as borrower, certain of the Debtors, as guarantors (the Guarantors and, together with the Company, the Loan Parties), the lenders from time to time party thereto (the DIP Lenders) and Wilmington Trust, National Association, as administrative agent and collateral agent for the DIP Lenders (in such capacities, the DIP Agent).

The DIP Credit Agreement, which has been approved by the Court on a final basis, provides for a super-priority senior secured debtor-in-possession credit facility (the DIP Facility) consisting of term loans (collectively, the DIP Term Loan) in the aggregate principal amount of up to $275 million that may be funded in not more than two draws not later than six months after the effective date of the DIP Facility (such six month period, the Availability Period). Any portion of the DIP Term Loan commitment that has not been funded on or prior to the end of the Availability Period will be permanently cancelled. The

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DIP Facility includes a $75 million carve-out from the first priority lien granted in favor of the DIP Agent for the benefit of the DIP Lenders on all encumbered and unencumbered assets of the Loan Parties for super-priority claims relating to certain of the Debtors bonding obligations. See Item 7, Management s Discussion and Analysis Liquidity and Capital Resources Debtor-In-Possession Financing for more information.

Coal Characteristics

End users generally characterize coal as steam coal or metallurgical coal. Heat value, sulfur, ash, moisture content, and volatility, in the case of metallurgical coal, are important variables in the marketing and transportation of coal. These characteristics help producers determine the best end use of a particular type of coal. The following is a description of these general coal characteristics:

Heat Value. In general, the carbon content of coal supplies most of its heating value, but other factors also influence the amount of energy it contains per unit of weight. The heat value of coal is commonly measured in Btus. Coal is generally classified into four categories, lignite, subbituminous, bituminous and anthracite, reflecting the progressive response of individual deposits of coal to increasing heat and pressure. Anthracite is coal with the highest carbon content and, therefore, the highest heat value, nearing 15,000 Btus per pound. Bituminous coal, used primarily to generate electricity and to make coke for the steel industry, has a heat value ranging between 10,500 and 15,500 Btus per pound. Subbituminous coal ranges from 8,300 to 13,000 Btus per pound and is generally used for electric power generation. Lignite coal is a geologically young coal which has the lowest carbon content and a heat value ranging between 4,000 and 8,300 Btus per pound.

Sulfur Content. Federal and state environmental regulations, including regulations that limit the amount of sulfur dioxide that may be emitted as a result of combustion, have affected and may continue to affect the demand for certain types of coal. The sulfur content of coal can vary from seam to seam and within a single seam. The chemical composition and concentration of sulfur in coal affects the amount of sulfur dioxide produced in combustion. Coal-fueled power plants can comply with sulfur dioxide emission regulations by burning coal with low sulfur content, blending coals with various sulfur contents, purchasing emission allowances on the open market and/or using sulfur-dioxide emission reduction technology.

Ash. Ash is the inorganic residue remaining after the combustion of coal. As with sulfur, ash content varies from seam to seam. Ash content is an important characteristic of coal because it impacts boiler performance and electric generating plants must handle and dispose of ash following combustion. The composition of the ash, including the proportion of sodium oxide and fusion temperature, is also an important characteristic of coal, as it helps to determine the suitability of the coal to end users. The absence of ash is also important to the process by which metallurgical coal is transformed into coke for use in steel production.

Moisture. Moisture content of coal varies by the type of coal, the region where it is mined and the location of the coal within a seam. In general, high moisture content decreases the heat value and increases the weight of the coal, thereby making it more expensive to transport. Moisture content in coal, on an as-sold basis, can range from approximately 2% to over 30% of the coal s weight.

Other. Users of metallurgical coal measure certain other characteristics, including fluidity, swelling capacity and volatility to assess the strength of coke produced from a given coal or the amount of coke that certain types of coal will yield. These characteristics may be important elements in determining the value of the metallurgical coal we produce and market.

The Coal Industry

Background. Coal is traded globally and can be transported to demand centers by ship, rail, barge or truck. Total world coal production reached 7.7 billion tonnes in 2014, according to the International Energy Agency (IEA). Total hard coal production decreased 0.5% to an estimated 6.9 billion tonnes in 2014 from 2013 levels, while global production of lignite coal declined roughly 3% to 810 million tonnes. Also according to IEA estimates, China remained the largest producer of coal in the world, producing over 3.5 billion tonnes in 2014. The United States and India follow China with total coal production of over

900 million tonnes and 600 million tonnes, respectively, in 2014. Preliminary data for 2015 suggests further erosion in global coal demand, but the relative ranking of producer countries remained the same.

Cross-border trade of coal was close to 1.4 billion tonnes in 2014, according to the IEA. Despite a drop in coal imports, China remained the largest importer of globally traded coal in 2014, taking over 305 million tonnes. India and Japan followed China with total coal imports of over 239 million tonnes and 187 million tonnes, respectively. Imports in OECD Europe were slightly higher in 2014 at an estimated 280 million tonnes.

The primary nations that are supplying coal to the global power and steel markets are Australia and Indonesia, as well as Russia, the United States, Colombia and South Africa. The IEA estimates that these key supply regions combined made up 86% of total global cross-border coal trade in 2014.

Global Coal Supply and Demand. The supply and demand fundamentals in global coal markets were further challenged in 2015. In China, a slowing economy along with new environmental restrictions and protectionist policies aiming to support the domestic coal industry resulted in a significant decline in coal imports in 2015 according to preliminary reports. China continues to add coal-based power generation capacity at a robust pace, but slower economic growth and/or additional regulations could continue to pressure demand in the near to intermediate term. Preliminary reports indicated that imports of metallurgical and thermal coal into China decreased by 11 and 43 million tonnes in 2015, respectively. The decline was primarily caused by weak industrial production and protectionist measures favoring domestic supply. Conversely, India is estimated to have sustained strong demand for both thermal and metallurgical coal in 2015 due to solid economic growth and associated electric power and infrastructure projects. Europe s weak economic growth combined with increased competition from other fuels and renewables resulted in further declines in import coal demand there. Additionally, economic uncertainties as well as the low-cost external supply of steel have pressured Europe s domestic steel producers which has translated into lower demand for metallurgical coal.

The IEA publishes a World Energy Outlook (WEO) in which it reports on multiple scenarios. For example, the New Policies Scenario incorporates policies and measures affecting energy markets that have already been adopted, as well as other relevant commitments and plans that have been announced by countries, including national pledges to reduce emissions and plans to phase out fossil fuel subsidies, even if the measures to implement these commitments have yet to be identified or announced. The Current Policies Scenario contemplates no changes in policies from the mid-point of the year of publication, assuming that governments do not implement any commitments that have yet to be finalized by legislation and will not introduce any new policies affecting coal usage. Finally, the 450 Scenario assumes implementation of a set of government policies consistent with a goal of limiting long-term increases in the average global temperature to two degrees Celsius, a limit determined by various governments and non-governmental organizations and recognized by nations of the world in the 2010 United Nations Climate Change Conference.

The IEA makes projections about world coal demand based on various future scenarios for energy development. The scenarios used by the IEA as the bases for these projections vary by time and publication. Further details are available to the public directly from the IEA, including through the IEA s website: http://www.iea.org/publications/scenariosandprojections/. Information contained on or accessible through the IEA s website is not incorporated by reference into this Annual Report on Form 10-K.

The IEA estimates in its WEO 2015, Current Policies Scenario, that worldwide primary energy demand will grow 45%, whereas the New Policies Scenario projects 32% growth, between 2013 and 2040. Demand for coal during this time period is projected to rise 43% and 12% under the Current Policies Scenario and the New Policies Scenario, respectively.

The IEA expects coal to retain its prominent presence as a fuel for the power sector worldwide under the Current Policies Scenario. Coal s share of the power generation mix was 41% in 2013. By 2040, the IEA s Current Policies Scenario estimates that coal s fuel share of global power generation will be 38% as it continues to have the largest share of worldwide electric power production. Under the New Policies and 450 scenarios, coal s fuel share of global power generation is projected to be 30% and 12%, respectively.

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Most coal consumption growth is expected to occur in Asia, with China and India as the largest consumers going forward. In the metallurgical markets, we expect somewhat modest growth in near-term steel demand based on slower economic growth. Moreover, we expect continued supply rationalization for global metallurgical coal.

The IEA also projects that global natural gas-fueled electricity generation will grow from 22% share in 2013 to 24% under the Current Policies scenario. IEA s New Policies Scenario shows gas share growing only slightly to 23% share by 2040. However, under the 450 Scenario, natural gas share declines to 16% by 2040. The 450 Scenario assumes the generation share from renewable sources will grown more than fivefold from 6% in 2013 to 32% by 2040. Electricity generation from nuclear power is expected to fall from 11% to 9% under the Current Policies Scenario, while growing to 11% or 18% under the New Policies and 450 scenarios, respectively.

As noted above, projected coal usage is highest under the Current Policies Scenario. Future energy use consistent with the 450 Scenario would likely yield results materially lower than the projections noted above under the Current Policies Scenario or the New Policies Scenario.

U.S. Coal Consumption. In the United States, coal is used primarily by power plants to generate electricity, by steel companies to produce coke for use in blast furnaces, and by a variety of industrial users to heat and power foundries, cement plants, paper mills, chemical plants and other manufacturing or processing facilities. Although final data are not yet available, coal consumption in the United States is estimated to be approximately 809 million tons in 2015, according to the Energy Information Administration s (EIA) Short Term Energy Outlook. Coal consumption decreased in 2015 by 12%, or around 108 million tons.

According to the EIA, coal accounted for approximately 33% of U.S. electricity generation in 2015. This is 5 percentage points lower than the same period in 2014 and represents the lowest share for coal fueled power generation in at least 60 years. This decline in domestic coal consumption was caused by a convergence of factors including record high natural gas production along with the lowest natural gas prices since 1999, coal unit retirements following the implementation of the Mercury and Air Toxics Standards regulations and growing power generation from wind and solar.

The following chart shows the breakdown of U.S. electricity generation by energy source for 2014 and 2015 according to the EIA:

Source: EIA Electric Power Monthly (February 2016).

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Historically, coal has been considerably less expensive than natural gas or oil. However, the growth of hydraulic fracturing (fracking) combined with less-than-projected electric power demand has resulted in oversupply. Natural gas inventories at the end of 2015 were 3.6 trillion cubic feet, which was 535 Bcf (17%) above the end of 2014 and 15% above the five-year average.

While demand for natural gas is expected to increase in the coming years from new industrial users and exports, the current oversupply has suppressed natural gas prices to levels where coal is less competitive. As drilling for new natural gas has dropped to at least a 28-year low, EIA expects natural gas prices to increase in the coming years which we expect to improve coal s relative competitiveness.

While coal s prospects with regard to natural gas should improve, the effects of new regulations on the use of coal, particularly regarding carbon dioxide emissions and climate change impacts, are evolving. EIA s Annual Energy Outlook forecast does not reflect the impact of carbon regulations such as the Clean Power Plan on domestic coal consumption for power generation. However, EIA has published an analysis on the effects the Clean Power Plan would have on domestic coal consumption. EIA believes that even though the regulation targets coal use in power generation, coal will maintain a critical role for power generation in the U.S.

Although the proposed Clean Power Plan rule results in less coal-fired electricity generation, several factors contribute to projected increases in coal generation from 2024 through 2040. Demand for electricity increases, and a combination of rising natural gas prices and increased renewable capacity translates to increased utilization at existing coal plants, even after significant amounts of coal capacity are retired. Also, in the Base Policy case, the standards set by the Clean Power Plan are assumed to remain constant after 2030. - EIA Today in Energy, June 10, 2015

Even though the validity of the Clean Power Plan is being tested by the courts, we included EIA s analysis of the originally proposed rule as a proxy for either the Clean Power Plan or other carbon regulations. We expect EIA will incorporate their analysis of the effects of the Clean Power Plan, which has been promulgated in 2015, in their upcoming release of the Annual Energy Outlook in April 2016. The 2020 and 2040 values are from EIA s analysis for the proposed Clean Power Plan published on May 22, 2015:

Sector	Actual 2010	Estimated 2015	2016	Forecast 2020	2040	Annual Growth 2013 - 2040
			(Tons, in millions)			
Electric power	975	747	746	694	677	(0.9)%
Other industrial	49	40	41	46	49	0.5%
Coke plants	21	19	17	21	18	(0.7)%
Residential/commercial	3	3	2	2	2	0.5%
*Total U.S. coal consumption	1,049	809	807	770	746	0.2%

Source: EIA Analysis of the Impacts of the Clean Power Plan (May 22, 2015)

EIA Short Term Energy Outlook (February 2016)

EIA Monthly Energy Review (February 2016)

*   Columns may not total due to rounding.

U.S. Coal Production. The United States is the second largest coal producer in the world, exceeded only by China. According to the EIA, there are over 200 billion tons of recoverable coal in the United States. The U.S. Department of Energy estimates that current domestic recoverable coal reserves could supply enough electricity to satisfy domestic demand for over 150 years.

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Coal is mined from coal fields throughout the United States, with the major production centers located in the western United States, the Appalachian region and the Interior. According to the EIA and MSHA, U.S. coal production declined an estimated 109 million tons in 2015, to 891 million tons.

The EIA subdivides United States coal production into three major areas: Western, Appalachia and Interior.

The Western area includes the Powder River Basin and the Western Bituminous region. According to the EIA, coal produced in the western United States declined from an estimated 542 million tons in 2014 to 494 million tons in 2015. The Powder River Basin is located in northeastern Wyoming and southeastern Montana and is the largest producing region in the United States. Coal from this region is sub-bituminous coal with low sulfur content ranging from 0.2% to 0.9% and heating values ranging from 8,000 to 9,500 Btu. The price of Powder River Basin coal is generally less than that of coal produced in other regions because Powder River Basin coal exists in greater abundance and is easier to mine and, thus, has a lower cost of production. The Western Bituminous region includes Colorado, Utah and southern Wyoming. Coal from this region typically has low sulfur content ranging from 0.4% to 0.8% and heating values ranging from 10,000 to 12,200 Btu.

The Appalachia region is further divided into north, central and southern regions. According to the EIA, coal produced in the Appalachian region fell from 268 million tons in 2014 to 228 million tons in 2015. Appalachian coal is located near the prolific eastern shale-gas producing regions. Central Appalachia is further disadvantaged for power generation because of the depletion of economically attractive reserves, permitting issues and increasing costs of production. Central Appalachia includes eastern Kentucky, Tennessee, Virginia and southern West Virginia. Coal mined from this region generally has a high heat value ranging from 11,400 to 13,200 Btu and a sulfur content ranging from 0.2% to 2.0%. Northern Appalachia includes Maryland, Ohio, Pennsylvania and northern West Virginia. Coal from this region generally has a high heat value ranging from 10,300 to 13,500 Btu and a sulfur content ranging from 0.8% to 4.0%. Southern Appalachia primarily covers Alabama and generally has a heat content ranging from 11,300 to 12,300 Btu and a sulfur content ranging from 0.7% to 3.0%.

The Interior region includes the Illinois Basin, Gulf Lignite production in Texas and Louisiana, and a small producing area in Kansas, Oklahoma, Missouri and Arkansas. The Illinois Basin is the largest producing region in the Interior and consists of Illinois, Indiana and western Kentucky. According to the EIA, coal produced in the Interior region fell from 189 million tons in 2014 to approximately 169 million tons in 2015. Coal from the Illinois Basin generally has a heat value ranging from 10,100 to 12,600 Btu and has a sulfur content ranging from 1.0% to 4.3%. Despite its high sulfur content, coal from the Illinois Basin can generally be used by electric power generation facilities that have installed emissions control devices, such as scrubbers.

U.S. Coal Exports and Imports. Coal exports declined approximately 20 million tons to 77 million tons in 2015. The decline was primarily caused by growing global coal supply along with slowing demand growth which displaced some of the volume originating in the United States. Additionally, unfavorable foreign currency exchange disadvantaged some United States coal in certain markets. The seaborne market is cyclical, but in their New Policies Scenario the IEA projects seaborne coal trade to grow to 1.1 billion tonnes by 2020, an increase of 59 million tons from 2015 levels.

Historically, coal imported from abroad has represented a relatively small share of total domestic coal consumption, and this remained the case in 2015. Imports reached close to 36 million tons in 2007, but have fallen since then. According to the EIA, coal imports were 11.3 million tons in 2015. The decline is mostly attributable to more competitive pricing for domestic coal. The majority of the coal imported into the United States originates from Colombia.

Coal Mining Methods

The geological characteristics of our coal reserves largely determine the coal mining method we employ. We use two primary methods of mining coal: surface mining and underground mining.

Surface Mining. We use surface mining when coal is found close to the surface. We have included the identity and location of our surface mining operations below under Our Mining Operations-General. The majority of the coal we produce comes from surface mining operations.

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Surface mining involves removing the topsoil then drilling and blasting the overburden (earth and rock covering the coal) with explosives. We then remove the overburden with heavy earth-moving equipment, such as draglines, power shovels, excavators and loaders. Once exposed, we drill, fracture and systematically remove the coal using haul trucks or conveyors to transport the coal to a preparation plant or to a loadout facility. We reclaim disturbed areas as part of our normal mining activities. After final coal removal, we use draglines, power shovels, excavators or loaders to backfill the remaining pits with the overburden removed at the beginning of the process. Once we have replaced the overburden and topsoil, we reestablish vegetation and plant life into the natural habitat and make other improvements that have local community and environmental benefits.

The following diagram illustrates a typical dragline surface mining operation:

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Underground Mining. We use underground mining methods when coal is located deep beneath the surface. We have included the identity and location of our underground mining operations below under Our Mining Operations-General.

Our underground mines are typically operated using one or both of two different mining techniques: longwall mining and room-and-pillar mining.

Longwall Mining. Longwall mining involves using a mechanical shearer to extract coal from long rectangular blocks of medium to thick seams. Ultimate seam recovery using longwall mining techniques can exceed 75%. In longwall mining, continuous miners are used to develop access to these long rectangular coal blocks. Hydraulically powered supports temporarily hold up the roof of the mine while a rotating drum mechanically advances across the face of the coal seam, cutting the coal from the face. Chain conveyors then move the loosened coal to an underground mine conveyor system for delivery to the surface. Once coal is extracted from an area, the roof is allowed to collapse in a controlled fashion. The following diagram illustrates a typical underground mining operation using longwall mining techniques:

Room-and-Pillar Mining. Room-and-pillar mining is effective for small blocks of thin coal seams. In room-and-pillar mining, a network of rooms is cut into the coal seam, leaving a series of pillars of coal to support the roof of the mine. Continuous miners are used to cut the coal and shuttle cars are used to transport the coal to a conveyor belt for further transportation to the surface. The pillars generated as part of this mining method can constitute up to 40% of the total coal in a seam. Higher seam recovery rates can be achieved if retreat mining is used. In retreat mining, coal is mined from the pillars as workers retreat. As retreat mining occurs, the roof is allowed to collapse in a controlled fashion.

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The following diagram illustrates our typical underground mining operation using room-and-pillar mining techniques:

Coal Preparation and Blending. We crush the coal mined from our Powder River Basin mining complexes and ship it directly from our mines to the customer. Typically, no additional preparation is required for a saleable product. Coal extracted from some of our underground mining operations contains impurities, such as rock, shale and clay occupying a wide range of particle sizes. The majority of our mining operations in the Appalachia region use a coal preparation plant located near the mine or connected to the mine by a conveyor. These coal preparation plants allow us to treat the coal we extract from those mines to ensure a consistent quality and to enhance its suitability for particular end-users. In addition, depending on coal quality and customer requirements, we may blend coal mined from different locations, including coal produced by third parties, in order to achieve a more suitable product.

The treatments we employ at our preparation plants depend on the size of the raw coal. For coarse material, the separation process relies on the difference in the density between coal and waste rock and, for the very fine fractions, the separation process relies on the difference in surface chemical properties between coal and the waste minerals. To remove impurities, we crush raw coal and classify it into various sizes. For the largest size fractions, we use dense media vessel separation techniques in which we float coal in a tank containing a liquid of a pre-determined specific gravity. Since coal is lighter than its impurities, it floats, and we can separate it from rock and shale. We treat intermediate sized particles with dense medium cyclones, in which a liquid is spun at high speeds to separate coal from rock. Fine coal is treated in spirals, in which the differences in density between coal and rock allow them, when suspended in water, to be separated. Ultra fine coal is recovered in column flotation cells utilizing the differences in surface chemistry between coal and rock. By injecting stable air bubbles through a suspension of ultra fine coal and rock, the coal particles adhere to the bubbles and rise to the surface of the column where they are removed. To minimize the moisture content in coal, we process most coal sizes through centrifuges. A centrifuge spins coal very quickly, causing water accompanying the coal to separate.

For more information about the locations of our preparation plants, you should see the section entitled Our Mining Operations below.

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Our Mining Operations

General. At December 31, 2015, we operated, or contracted out the operation of, 13 active mines in the United States. Our reportable segments are based on the major coal producing basins in which we operate. Our reportable segments are the Powder River Basin segment, with operations in Wyoming; and the Appalachia segment, with operations in West Virginia, Kentucky, Maryland and Virginia. We also sell coal from operations in Colorado and Illinois. Geology, coal transportation routes to consumers, regulatory environments and coal quality can vary from segment to segment. We incorporate by reference the information about the operating results of each of our segments for the years ended December 31, 2015, 2014, and 2013 contained in Note 27 beginning on page F-52.

In general, we have developed our mining complexes and preparation plants at strategic locations in close proximity to rail or barge shipping facilities. Coal is transported from our mining complexes to customers by means of railroads, trucks, barge lines, and ocean-going vessels from terminal facilities. We currently own or lease under long-term arrangements a substantial portion of the equipment utilized in our mining operations. We employ sophisticated preventative maintenance and rebuild programs and upgrade our equipment to ensure that it is productive, well-maintained and cost-competitive.

The following map shows the locations of our active mining operations:

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The following table provides a summary of information regarding our active mining complexes as of December 31, 2015, including the total sales associated with these complexes for the years ended December 31, 2013, 2014, and 2015 and the total reserves associated with these complexes at December 31, 2015. The amount disclosed below for the total cost of property, plant and equipment of each mining complex does not include the costs of the coal reserves that we have assigned to an individual complex.

Mining Complex	Captive Mines(1)	Contract Mines(1)	Mining Equipment	Railroad	2013	Tons Sold(2)(3) 2014 (Million tons)	2015	Total Cost of Property, Plant and Equipment at December 31, 2015 ($ millions)	Assigned Reserves (Million tons)
Powder River Basin:									
Black Thunder	S		D, S	UP/BN	100.7	101.2	99.5	$ 1,212.5	1,163.9
Coal Creek	S		D, S	UP/BN	8.5	9.4	7.8	146.6	153.7
Other:									
West Elk	U		LW, CM	UP	6.1	6.5	5.1	417.9	53.5
Viper	U		CM		2.2	2.2	2.1	99.8	37.2
Appalachia:									
Coal-Mac	S		L, E	NS/CSX	3.1	2.8	2.4	205.4	24.6
Lone Mountain	U(3)		CM	NS/CSX	2.0	1.9	1.6	256.2	10.2
Mountain Laurel	U		L, LW, CM	CSX	2.9	2.6	2.3	4.1	
Beckley	U		CM	CSX	1.1	1.0	0.9		
Vindex	S		L, E	CSX	0.6	0.5	0.6		
Sycamore No. 2		U	CM		0.4	0.5	0.2		
Sentinel	U		CM	CSX	1.0	1.1	0.9		
Leer	U		CM, LW	CSX	0	2.7	2.9	463.2	40.1
Totals					128.6	132.4	126.3	$ 2,805.7	1,483.2

S = Surface mine	D = Dragline	UP = Union Pacific Railroad
U = Underground mine	L = Loader/truck	CSX = CSX Transportation
	S = Shovel/truck	BN = Burlington Northern-Santa Fe Railway
	E = Excavator/truck	NS = Norfolk Southern Railroad
	LW = Longwall	
	CM = Continuous miner	
	HW = Highwall miner	

(1) Amounts in parentheses indicate the number of captive and contract mines, if more than one, at the mining complex as of December 31, 2015. Captive mines are mines that we own and operate on land owned or leased by us. Contract mines are mines that other operators mine for us under contracts on land owned or leased by us.

(2) Tons of coal we purchased from third parties that were not processed through our loadout facilities are not included in the amounts shown in the table above.

(3) 2013 tons sold numbers do not include tons of coal sold from the following mining complexes that were sold in the 2013 calendar year: Dugout Canyon, Skyline and Sufco. We sold 5.3 million tons of coal from these mining complexes in 2013. 2013 and 2014 tons sold numbers do not include tons of coal sold from the Hazard mining complex, which was sold in 2014, or tons of coal sold from the Cumberland River mining complex, which was idled

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in 2014. We sold 2.7 million and 0.8 million tons of coal from these two mining complexes in 2013 and 2014, respectively.

Powder River Basin

Black Thunder. Black Thunder is a surface mining complex located on approximately 35,800 acres in Campbell County, Wyoming. The Black Thunder complex extracts steam coal from the Upper Wyodak and Main Wyodak seams.

We control a significant portion of the coal reserves through federal and state leases. The Black Thunder mining complex had approximately 1.2 billion tons of proven and probable reserves at December 31, 2015. The air quality permit for the Black Thunder mine allows for the mining of coal at a rate of 190 million tons per year. Several large tracts of coal adjacent to the Black Thunder mining complex have been nominated for lease, and other potential large areas of unleased coal remain available for nomination by us or other mining operations. The U.S. Department of Interior Bureau of Land Management, which we refer to as the BLM, will determine if the tracts will be leased and, if so, the final boundaries of, and the coal tonnage for, these tracts.

The Black Thunder mining complex currently consists of active pit areas and three loadout facilities. We ship all of the coal raw to our customers via the Burlington Northern Santa Fe and Union Pacific railroads. We do not process the coal mined at this complex. Each of the loadout facilities can load a 15,000-ton train in less than two hours.

Coal Creek. Coal Creek is a surface mining complex located on approximately 7,400 acres in Campbell County, Wyoming. The Coal Creek mining complex extracts steam coal from the Wyodak-R1 and Wyodak-R3 seams.

We control a significant portion of the coal reserves through federal and state leases. The Coal Creek mining complex had approximately 153.7 million tons of proven and probable reserves at December 31, 2015. The air quality permit for the Coal Creek mine allows for the mining of coal at a rate of 50 million tons per year.

The Coal Creek complex currently consists of active pit areas and a loadout facility. We ship all of the coal raw to our customers via the Burlington Northern Santa Fe and Union Pacific railroads. We do not process the coal mined at this complex. The loadout facility can load a 15,000-ton train in less than three hours.

Appalachia

Coal-Mac. Coal-Mac is a surface mining complex located on approximately 46,000 acres in Logan and Mingo Counties, West Virginia. Surface mining operations at the Coal-Mac mining complex extract steam coal primarily from the Coalburg and Stockton seams.

We control a significant portion of the coal reserves through private leases. The Coal-Mac mining complex had approximately 24.6 million tons of proven and probable reserves at December 31, 2015.

The complex currently consists of one captive surface mine, a preparation plant and two loadout facilities, which we refer to as Holden 22 and Ragland. We ship coal trucked to the Ragland loadout facility directly to our customers via the Norfolk Southern railroad. The Ragland loadout facility can load a 10,000-ton train in less than four hours. We ship coal trucked to the Holden 22 loadout facility directly to our customers via the CSX railroad. We wash all of the coal transported to the Holden 22 loadout facility at an adjacent 600-ton-per-hour preparation plant. The Holden 22 loadout facility can load a 10,000-ton train in about four hours.

Lone Mountain. Lone Mountain is an underground mining complex located on approximately 54,000 acres in Harlan County, Kentucky and Lee County, Virginia. The Lone Mountain mining complex extracts steam and metallurgical coal from the Kellioka, Darby and Owl seams.

We control a significant portion of the coal reserves through private leases. The Lone Mountain mining complex had approximately 10.2 million tons of proven and probable reserves at December 31, 2015.

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The complex currently consists of three underground mines operating a total of six continuous miner sections. We process coal through a 1,200-ton-per-hour preparation plant. We then ship the coal to our customers via the Norfolk Southern or CSX railroad.

Mountain Laurel. Mountain Laurel is an underground and surface mining complex located on approximately 38,200 acres in Logan County and Boone County, West Virginia. Underground mining operations at the Mountain Laurel mining complex extract steam and metallurgical coal from the Cedar Grove and Alma seams. Surface mining operations at the Mountain Laurel mining complex extract coal from a number of different splits of the Five Block, Stockton and Coalburg seams.

The complex currently consists of one underground mine operating a longwall and one continuous miner sections, a preparation plant and a loadout facility. We process most of the coal through a 2,100-ton-per-hour preparation plant before shipping the coal to our customers via the CSX railroad. The loadout facility can load a 15,000-ton train in less than four hours.

Beckley. The Beckley mining complex is located on approximately 15,400 acres in Raleigh County, West Virginia. Beckley is extracting high quality, low-volatile metallurgical coal in the Pocahontas No. 3 seam.

Coal is belted from the mine to a 600-ton-per-hour preparation plant before shipping the coal via the CSX railroad. The loadout facility can load a 10,000-ton train in less than four hours.

Vindex. The Vindex mining complex consists of a surface mine located on approximately 40,300 acres in Maryland and West Virginia. Mining operations extract coal from the Upper Freeport, Middle Kittanning, Pittsburgh, Little Pittsburgh and Redstone seams. Coal is sold on a raw basis and trucked directly to the customer. This operation had been idled effective March 1, 2016 and is currently in reclamation.

Sentinel. The Sentinel mining complex consists of one underground mine, a preparation plant and a loadout facility located on approximately 25,600 acres in Barbour County, West Virginia. Mining operations currently extract coal from the Clarion coal seam. Coal from the Sentinel mining complex is processed through the preparation plant and shipped by CSX rail to customers.

Leer. The Leer Complex, located in Taylor County, West Virginia, includes approximately 40.1 million tons of coal reserves as of December 31, 2015 and has both steam and metallurgical quality coal in the Lower Kittanning seam, and is part of approximately 79,400 acres that is considered our Tygart Valley area. Substantially all of the reserves at Leer are owned rather than leased from third parties.

The Leer Complex is designed to have 3.5 million tons of capacity per year of high quality coal that is well suited to both the high volatile metallurgical and utility markets. All the production is processed through a 1,400 ton-per-hour preparation plant and loaded on the CSX railroad. A 15,000-ton train can be loaded in less than four hours. Without the addition of more coal reserves, the current reserves could sustain the longwall mine at current production levels until about 2029 and support continuous miner production until 2035.

Other

West Elk. West Elk is an underground mining complex located on approximately 17,800 acres in Gunnison County, Colorado. The West Elk mining complex extracts steam coal from the E seam.

We control a significant portion of the coal reserves through federal and state leases. The West Elk mining complex had approximately 53.5 million tons of proven and probable reserves at December 31, 2015.

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The West Elk complex currently consists of a longwall, continuous miner sections and a loadout facility. We ship most of the coal raw to our customers via the Union Pacific railroad. The loadout facility can load an 11,000-ton train in less than three hours.

Viper. The Viper mining complex consists of one underground coal mine and a preparation plant located on approximately 46,500 acres in central Illinois near the city of Springfield. Mining operations extract steam coal from the Illinois No. 5 seam, also referred to as the Springfield seam. All coal is processed through an 800 ton-per-hour preparation plant and shipped to customers by on-highway trucks.

We control a significant portion of the coal reserves through private leases. As of December 31, 2015, we had approximately 37.2 million tons of proven and probable reserves.

Sales, Marketing and Trading

Overview. Coal prices are influenced by a number of factors and can vary materially by region. The price of coal within a region is influenced by market conditions, coal quality, transportation costs involved in moving coal from the mine to the point of use and mine operating costs. For example, higher carbon and lower ash content generally result in higher prices, and higher sulfur and higher ash content generally result in lower prices within a given geographic region.

The cost of coal at the mine is also influenced by geologic characteristics such as seam thickness, overburden ratios and depth of underground reserves. It is generally less expensive to mine coal seams that are thick and located close to the surface than to mine thin underground seams. Within a particular geographic region, underground mining, which is the primary mining method we use in certain of our Appalachian mines, is generally more expensive than surface mining, which is the mining method we use in the Powder River Basin, and for certain of our Appalachian mines. This is the case because of the higher capital costs, including costs for construction of extensive ventilation systems, and higher per unit labor costs due to lower productivity associated with underground mining.

Our sales, marketing and trading functions are principally based in St. Louis, Missouri and consist of sales and trading, transportation and distribution, quality control and contract administration personnel as well as revenue management. We also have smaller groups of sales personnel in our Singapore and London offices. In addition to selling coal produced in our mining complexes, from time to time we purchase and sell coal mined by others, some of which we blend with coal produced from our mines. We focus on meeting the needs and specifications of our customers rather than just selling our coal production.

Customers. The Company markets its steam and metallurgical coal to domestic and foreign utilities, steel producers and other industrial facilities. For the year ended December 31, 2015, we derived approximately 18% of our total coal revenues from sales to our three largest customers U.S. Steel, Southern Company and Tennessee Valley Authority - and approximately 39% of our total coal revenues from sales to our 10 largest customers.

In 2015, we sold coal to domestic customers located in 36 different states. The locations of our mines enable us to ship coal to most of the major coal-fueled power plants in the United States.

In addition, in 2015 we also exported coal to Europe, Asia, North America (outside the United States) and South America. Exports to foreign countries were $0.4 billion, $0.6 billion and $0.8 billion for the years ended December 31, 2015, 2014 and 2013, respectively. As of December 31, 2015 and 2014, trade receivables related to metallurgical-quality coal sales totaled $32.8 million and $76.0 million, respectively, or 28% of total trade receivables. We do not have foreign currency exposure for our international sales as all sales are denominated and settled in U.S. dollars.

The Company s foreign revenues by coal shipment destination for the year ended December 31, 2015, were as follows:

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(In thousands)		
Europe	$	170,314
Asia		96,523
Central and South America		55,323
North America		40,315
Brokered Sales		32,848
Total	$	395,323

Long-Term Coal Supply Arrangements

As is customary in the coal industry, we enter into fixed price, fixed volume long-term supply contracts, the terms of which are more than one year, with many of our customers. Multiple year contracts usually have specific and possibly different volume and pricing arrangements for each year of the contract. Long-term contracts allow customers to secure a supply for their future needs and provide us with greater predictability of sales volume and sales prices. In 2015, we sold approximately 68% of our coal under long-term supply arrangements. The majority of our supply contracts include a fixed price for the term of the agreement or a pre-determined escalation in price for each year. Some of our long-term supply agreements may include a variable pricing system. While most of our sales contracts are for terms of one to five years, some are as short as one month and other contracts have terms exceeding five years. At December 31, 2015, the average volume-weighted remaining term of our long-term contracts was approximately 2.12 years, with remaining terms ranging from one to P5Y years. At December 31, 2015, remaining tons under long-term supply agreements, including those subject to price re-opener or extension provisions, were approximately 144 million tons.

We typically sell coal to customers under long-term arrangements through a request-for-proposal process. The terms of our coal sales agreements result from competitive bidding and negotiations with customers. Consequently, the terms of these contracts vary by customer, including base price adjustment features, price re-opener terms, coal quality requirements, quantity parameters, permitted sources of supply, future regulatory changes, extension options, *force majeure*, termination, damages and assignment provisions. Our long-term supply contracts typically contain provisions to adjust the base price due to new statutes, ordinances or regulations. Additionally, some of our contracts contain provisions that allow for the recovery of costs affected by modifications or changes in the interpretations or application of any applicable statute by local, state or federal government authorities. These provisions only apply to the base price of coal contained in these supply contracts. In some circumstances, a significant adjustment in base price can lead to termination of the contract.

Certain of our contracts contain index provisions that change the price based on changes in market based indices or changes in economic indices or both. Certain of our contracts contain price re-opener provisions that may allow a party to commence a renegotiation of the contract price at a pre-determined time. Price re-opener provisions may automatically set a new price based on prevailing market price or, in some instances, require us to negotiate a new price, sometimes within a specified range of prices. In a limited number of agreements, if the parties do not agree on a new price, either party has an option to terminate the contract. In addition, certain of our contracts contain clauses that may allow customers to terminate the contract in the event of certain changes in environmental laws and regulations that impact their operations.

Coal quality and volumes are stipulated in coal sales agreements. In most cases, the annual pricing and volume obligations are fixed, although in some cases the volume specified may vary depending on the customer consumption requirements. Most of our coal sales agreements contain provisions requiring us to deliver coal within certain ranges for specific coal characteristics such as heat content (for thermal coal contracts), volatile matter (for metallurgical coal contracts), and for both types of contracts, sulfur, ash and moisture content. Failure to meet these specifications can result in economic penalties, suspension or cancellation of shipments or termination of the contracts.

Our coal sales agreements also typically contain *force majeure* provisions allowing temporary suspension of performance by us or our customers, during the duration of events beyond the control of the affected party, including events such as strikes, adverse mining conditions, mine closures or serious transportation problems that affect us or unanticipated plant outages that may affect the buyer. Our contracts also generally provide that in the event a *force majeure* circumstance exceeds a

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certain time period, the unaffected party may have the option to terminate the purchase or sale in whole or in part. Some contracts stipulate that this tonnage can be made up by mutual agreement or at the discretion of the buyer. Agreements between our customers and the railroads servicing our mines may also contain *force majeure* provisions.

In most of our contracts, we have a right of substitution (unilateral or subject to counterparty approval), allowing us to provide coal from different mines, including third-party mines, as long as the replacement coal meets quality specifications and will be sold at the same equivalent delivered cost.

In some of our coal supply contracts, we agree to indemnify or reimburse our customers for damage to their or their rail carrier s equipment while on our property, which result from our or our agents negligence, and for damage to our customer s equipment due to non-coal materials being included with our coal while on our property.

Trading. In addition to marketing and selling coal to customers through traditional coal supply arrangements, we seek to optimize our coal production and leverage our knowledge of the coal industry through a variety of other marketing, trading and asset optimization strategies. From time to time, we may employ strategies to use coal and coal-related commodities and contracts for those commodities in order to manage and hedge volumes and/or prices associated with our coal sales or purchase commitments, reduce our exposure to the volatility of market prices or augment the value of our portfolio of traditional assets. These strategies may include physical coal contracts, as well as a variety of forward, futures or options contracts, swap agreements or other financial instruments.

We maintain a system of complementary processes and controls designed to monitor and manage our exposure to market and other risks that may arise as a consequence of these strategies. These processes and controls seek to preserve our ability to profit from certain marketing, trading and asset optimization strategies while mitigating our exposure to potential losses. You should see Item 7A, entitled Quantitative and Qualitative Disclosures About Market Risk for more information about the market risks associated with these strategies at December 31, 2015.

Transportation. We ship our coal to domestic customers by means of railcars, barges, vessels or trucks, or a combination of these means of transportation. We generally sell coal used for domestic consumption free on board (f.o.b.) at the mine or nearest loading facility. Our domestic customers normally bear the costs of transporting coal by rail, barge or vessel.

Historically, most domestic electricity generators have arranged long-term shipping contracts with rail or barge companies to assure stable delivery costs. Transportation can be a large component of a purchaser s total cost. Although the purchaser pays the freight, transportation costs still are important to coal mining companies because the purchaser may choose a supplier largely based on cost of transportation. Transportation costs borne by the customer vary greatly based on each customer s proximity to the mine and our proximity to the loadout facilities. Trucks and overland conveyors haul coal over shorter distances, while barges, Great Lake carriers and ocean vessels move coal to export markets and domestic markets requiring shipment over the Great Lakes and several river systems.

Most coal mines are served by a single rail company, but much of the Powder River Basin is served by two rail carriers: the Burlington Northern-Santa Fe railroad and the Union Pacific railroad. We generally transport coal produced at our Appalachian mining complexes via the CSX railroad or the Norfolk Southern railroad. Besides rail deliveries, some customers in the eastern United States rely on a river barge system.

We generally sell coal to international customers at the export terminal, and we are usually responsible for the cost of transporting coal to the export terminals. In some cases we may enter into long-term throughput agreements with export terminals that contain minimum throughput obligations. In the event we do not meet those minimum thresholds, we may be obligated to pay liquidated damage amounts to such terminals. We transport our coal to Atlantic coast terminals or terminals along the Gulf of Mexico for transportation to international customers. Our international customers are generally responsible for paying the cost of ocean freight. We may also sell coal to international customers delivered to an unloading facility at the destination country.

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We own a 22% interest in Dominion Terminal Associates, a partnership that operates a ground storage-to-vessel coal transloading facility in Newport News, Virginia. The facility has a rated throughput capacity of 20 million tons of coal per year and ground storage capacity of approximately 1.7 million tons. The facility serves international customers, as well as domestic coal users located along the Atlantic coast of the United States.

We also own a 38% interest in Millennium Bulk Terminals-Longview, LLC (MBT), the owner of a bulk commodity terminal on the Columbia River near Longview, Washington. MBT is currently working to obtain the required approvals and necessary permits to complete upgrades to enable coal shipments through the brownfield terminal.

Competition

The coal industry is intensely competitive. The most important factors on which we compete are coal quality, delivered costs to the customer and reliability of supply. Our principal domestic competitors include Alpha Natural Resources, Inc., Cloud Peak Energy, CONSOL Energy Inc. and Peabody Energy Corp. Some of these coal producers are larger than we are and have greater financial resources and larger reserve bases than we do. We also compete directly with a number of smaller producers in each of the geographic regions in which we operate, as well as companies that produce coal from one or more foreign countries, such as Australia, Colombia, Indonesia and South Africa.

Additionally, coal competes with other fuels, such as natural gas, nuclear energy, hydropower, wind, solar and petroleum, for steam and electrical power generation. Costs and other factors relating to these alternative fuels, such as safety and environmental considerations, affect the overall demand for coal as a fuel.

Suppliers

Principal supplies used in our business include petroleum-based fuels, explosives, tires, steel and other raw materials as well as spare parts and other consumables used in the mining process. We use third-party suppliers for a significant portion of our equipment rebuilds and repairs, drilling services and construction. We use sole source suppliers for certain parts of our business such as explosives and fuel, and preferred suppliers for other parts of our business such as dragline and shovel parts and related services. We believe adequate substitute suppliers are available. For more information about our suppliers, you should see Item 1A, Risk Factors-Increases in the costs of mining and other industrial supplies, including steel-based supplies, diesel fuel and rubber tires, or the inability to obtain a sufficient quantity of those supplies, could negatively affect our operating costs or disrupt or delay our production.

Environmental and Other Regulatory Matters

Federal, state and local authorities regulate the U.S. coal mining industry with respect to matters such as employee health and safety and the environment, including the protection of air quality, water quality, wetlands, special status species of plants and animals, land uses, cultural and historic properties and other environmental resources identified during the permitting process. Reclamation is required during production and after mining has been completed. Materials used and generated by mining operations must also be managed according to applicable regulations and law. These laws have, and will continue to have, a significant effect on our production costs and our competitive position.

We endeavor to conduct our mining operations in compliance with applicable federal, state and local laws and regulations. However, due in part to the extensive, comprehensive and changing regulatory requirements, violations during mining operations occur from time to time. We cannot assure you that we have been or will be at all times in complete compliance with such laws and regulations. While it is not possible to accurately quantify the expenditures we incur to maintain compliance with all applicable federal and state laws, those costs have been and are expected to continue to be significant. Federal and state mining laws and regulations require us to obtain surety bonds to guarantee performance or payment of certain long-term obligations, including mine closure and reclamation costs, federal and state workers compensation benefits, coal

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leases and other miscellaneous obligations. Compliance with these laws has substantially increased the cost of coal mining for domestic coal producers.

Future laws, regulations or orders, as well as future interpretations and more rigorous enforcement of existing laws, regulations or orders, may require substantial increases in equipment and operating costs and delays, interruptions or a termination of operations, the extent to which we cannot predict. Future laws, regulations or orders may also cause coal to become a less attractive fuel source, thereby reducing coal s share of the market for fuels and other energy sources used to generate electricity. As a result, future laws, regulations or orders may adversely affect our mining operations, cost structure or our customers demand for coal.

The following is a summary of the various federal and state environmental and similar regulations that have a material impact on our business:

Mining Permits and Approvals. Numerous governmental permits or approvals are required for mining operations. When we apply for these permits and approvals, we may be required to prepare and present to federal, state or local authorities data pertaining to the effect or impact that any proposed production or processing of coal may have upon the environment. For example, in order to obtain a federal coal lease, an environmental impact statement must be prepared to assist the BLM in determining the potential environmental impact of lease issuance, including any collateral effects from the mining, transportation and burning of coal, which may in some cases include a review of impacts on climate change. The authorization, permitting and implementation requirements imposed by federal, state and local authorities may be costly and time consuming and may delay commencement or continuation of mining operations. In the states where we operate, the applicable laws and regulations also provide that a mining permit or modification can be delayed, refused or revoked if officers, directors, shareholders with specified interests or certain other affiliated entities with specified interests in the applicant or permittee have, or are affiliated with another entity that has, outstanding permit violations. Thus, past or ongoing violations of applicable laws and regulations could provide a basis to revoke existing permits and to deny the issuance of additional permits.

In order to obtain mining permits and approvals from federal and state regulatory authorities, mine operators must submit a reclamation plan for restoring, upon the completion of mining operations, the mined property to its prior condition or other authorized use. Typically, we submit the necessary permit applications several months or even years before we plan to begin mining a new area. Some of our required permits are becoming increasingly more difficult and expensive to obtain, and the application review processes are taking longer to complete and becoming increasingly subject to challenge, even after a permit has been issued.

Under some circumstances, substantial fines and penalties, including revocation or suspension of mining permits, may be imposed under the laws described above. Monetary sanctions and, in severe circumstances, criminal sanctions may be imposed for failure to comply with these laws.

Surface Mining Control and Reclamation Act. The Surface Mining Control and Reclamation Act, which we refer to as SMCRA, establishes mining, environmental protection, reclamation and closure standards for all aspects of surface mining as well as many aspects of underground mining. Mining operators must obtain SMCRA permits and permit renewals from the Office of Surface Mining, which we refer to as OSM, or from the applicable state agency if the state agency has obtained regulatory primacy. A state agency may achieve primacy if the state regulatory agency develops a mining regulatory program that is no less stringent than the federal mining regulatory program under SMCRA. All states in which we conduct mining operations have achieved primacy and issue permits in lieu of OSM.

In 1999, a federal court in West Virginia ruled that the stream buffer zone rule issued under SMCRA prohibited most excess spoil fills. While the decision was later reversed on jurisdictional grounds, the extent to which the rule applied to fills was left unaddressed. On December 12, 2008, OSM finalized a rulemaking regarding the interpretation of the stream buffer zone provisions of SMCRA which confirmed that excess spoil from mining and refuse from coal preparation could be placed in permitted areas of a mine site that constitute waters of the United States. That rule, however, was subject to a challenge in federal court. In addition, on November 30, 2009, OSM announced that it would re-examine and reinterpret the regulations finalized eleven months earlier. On February 20, 2014, the federal court vacated the 2008 rule. On December 22, 2014, OSM

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published the final revisions to the stream buffer zone rule in the Federal Register. The revisions reinstate the previous version of the rule, but do not announce a new interpretation of the rule regarding the ability to construct excess spoil fills. We cannot predict how the regulations will be applied or how they may affect coal production, though there are reports that any reinterpretation of the prior version of the rule would be to restrict the ability to construct mining related structures in streams. Such an interpretation could curtail surface mining operations in and near streams-especially in central Appalachia.

SMCRA permit provisions include a complex set of requirements which include, among other things, coal prospecting; mine plan development; topsoil or growth medium removal and replacement; selective handling of overburden materials; mine pit backfilling and grading; disposal of excess spoil; protection of the hydrologic balance; subsidence control for underground mines; surface runoff and drainage control; establishment of suitable post mining land uses; and revegetation. We begin the process of preparing a mining permit application by collecting baseline data to adequately characterize the pre-mining environmental conditions of the permit area. This work is typically conducted by third-party consultants with specialized expertise and includes surveys and/or assessments of the following: cultural and historical resources; geology; soils; vegetation; aquatic organisms; wildlife; potential for threatened, endangered or other special status species; surface and ground water hydrology; climatology; riverine and riparian habitat; and wetlands. The geologic data and information derived from the other surveys and/or assessments are used to develop the mining and reclamation plans presented in the permit application. The mining and reclamation plans address the provisions and performance standards of the state s equivalent SMCRA regulatory program, and are also used to support applications for other authorizations and/or permits required to conduct coal mining activities. Also included in the permit application is information used for documenting surface and mineral ownership, variance requests, access roads, bonding information, mining methods, mining phases, other agreements that may relate to coal, other minerals, oil and gas rights, water rights, permitted areas, and ownership and control information required to determine compliance with OSM s Applicant Violator System, including the mining and compliance history of officers, directors and principal owners of the entity.

Once a permit application is prepared and submitted to the regulatory agency, it goes through an administrative completeness review and a thorough technical review. Also, before a SMCRA permit is issued, a mine operator must submit a bond or otherwise secure the performance of all reclamation obligations. After the application is submitted, a public notice or advertisement of the proposed permit is required to be given, which begins a notice period that is followed by a public comment period before a permit can be issued. It is not uncommon for a SMCRA mine permit application to take over a year to prepare, depending on the size and complexity of the mine, and anywhere from six months to two years or even longer for the permit to be issued. The variability in time frame required to prepare the application and issue the permit can be attributed primarily to the various regulatory authorities discretion in the handling of comments and objections relating to the project received from the general public and other agencies. Also, it is not uncommon for a permit to be delayed as a result of litigation related to the specific permit or another related company s permit.

In addition to the bond requirement for an active or proposed permit, the Abandoned Mine Land Fund, which was created by SMCRA, requires a fee on all coal produced. The proceeds of the fee are used to restore mines closed or abandoned prior to SMCRA s adoption in 1977. The current fee is $0.28 per ton of coal produced from surface mines and $0.12 per ton of coal produced from underground mines. In 2015, we recorded $32.7 million of expense related to these reclamation fees.

Surety Bonds. Mine operators are often required by federal and/or state laws, including SMCRA, to assure, usually through the use of surety bonds, payment of certain long-term obligations including mine closure or reclamation costs, federal and state workers compensation costs, coal leases and other miscellaneous obligations. Although surety bonds are usually noncancelable during their term, many of these bonds are renewable on an annual basis. Please see Failure to obtain or renew surety bonds on acceptable terms could affect our ability to secure reclamation and coal lease obligations and, therefore, our ability to mine or lease coal, and a loss or reduction in our ability to self-bond could have a material adverse effect on our business and results of operations, contained under the heading Risk Factors Risks related to Our Operations for a discussion of certain risks associated with our surety bonds.

The costs of these bonds have fluctuated in recent years while the market terms of surety bonds have generally become more unfavorable to mine operators. These changes in the terms of the bonds have been accompanied at times by a

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decrease in the number of companies willing to issue surety bonds. In order to address some of these uncertainties, we use self-bonding to secure performance of certain obligations in Wyoming. As of December 31, 2015, we have self-bonded an aggregate of approximately $485.5 million, posted an aggregate of approximately $188.0 million in surety bonds for reclamation purposes and secured $49.2 million in letters of credit and cash for reclamation bonding obligations. In addition, we had approximately $212.0 million of surety bonds, cash and letters of credit outstanding at December 31, 2015 to secure workers compensation, coal lease and other obligations.

For additional information, please see Failure to obtain or renew surety bonds on acceptable terms could affect our ability to secure reclamation and coal lease obligations, and, therefore, our ability to mine or lease coal, and a loss or reduction in our ability to self-bond could have a material, adverse effect on our business and results of operations, contained in Item 1A, Risk Factors Risk Related to Our Operations, for a discussion of certain risks associated with our surety bonds.

Mine Safety and Health. Stringent safety and health standards have been imposed by federal legislation since Congress adopted the Mine Safety and Health Act of 1969. The Mine Safety and Health Act of 1977 significantly expanded the enforcement of safety and health standards and imposed comprehensive safety and health standards on all aspects of mining operations. In addition to federal regulatory programs, all of the states in which we operate also have programs aimed at improving mine safety and health. Collectively, federal and state safety and health regulation in the coal mining industry is among the most comprehensive and pervasive systems for the protection of employee health and safety affecting any segment of U.S. industry. In reaction to recent mine accidents, federal and state legislatures and regulatory authorities have increased scrutiny of mine safety matters and passed more stringent laws governing mining. For example, in 2006, Congress enacted the MINER Act. The MINER Act imposes additional obligations on coal operators including, among other things, the following:

- development of new emergency response plans that address post-accident communications, tracking of miners, breathable air, lifelines, training and communication with local emergency response personnel;
- establishment of additional requirements for mine rescue teams;
- notification of federal authorities in the event of certain events;
- increased penalties for violations of the applicable federal laws and regulations; and
- requirement that standards be implemented regarding the manner in which closed areas of underground mines are sealed.

In 2008, the U.S. House of Representatives approved additional federal legislation which would have required new regulations on a variety of mine safety issues such as underground refuges, mine ventilation and communication systems. Although the U.S. Senate failed to pass that legislation, it is possible that similar legislation may be proposed in the future. Various states, including West Virginia, have also enacted laws to address many of the same subjects. The costs of implementing these safety and health regulations at the federal and state level have been, and will continue to be, substantial. In addition to the cost of implementation, there are increased penalties for violations which may also be substantial. Expanded enforcement has resulted in a proliferation of litigation regarding citations and orders issued as a result of the regulations.

Under the Black Lung Benefits Revenue Act of 1977 and the Black Lung Benefits Reform Act of 1977, each coal mine operator must secure payment of federal black lung benefits to claimants who are current and former employees and to a trust fund for the payment of benefits and medical expenses to claimants who last worked in the coal industry prior to July 1, 1973. The trust fund is funded by an excise tax on production of up to $1.10 per ton for coal mined in underground operations and up to $0.55 per ton for coal mined in surface operations. These amounts may not exceed 4.4% of the gross sales price. This excise tax does not apply to coal shipped outside the United States. In 2015, we recorded $66.1 million of expense related to this excise tax.

Clean Air Act. The federal Clean Air Act and similar state and local laws that regulate air emissions affect coal mining directly and indirectly. Direct impacts on coal mining and processing operations include Clean Air Act permitting requirements and emissions control requirements relating to particulate matter which may include controlling fugitive dust. The Clean Air Act also indirectly affects coal mining operations, for example, by extensively regulating the emissions of fine particulate matter measuring 2.5 micrometers in diameter or smaller, sulfur dioxide, nitrogen oxides, mercury and other compounds

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emitted by coal-fueled power plants and industrial boilers, which are the largest end-users of our coal. Continued tightening of the already stringent regulation of emissions is likely, such as the Mercury and Air Toxics Standard (MATS), finalized in 2011 and discussed in more detail below. In addition, the U.S. Environmental Protection Agency, which we refer to as EPA, has issued regulations on additional emissions, such as greenhouse gases (GHG), from new, modified, reconstructed and existing electric generating units, including coal-fired plants. Other GHG regulations apply to industrial boilers (see discussion of Climate Change, below). These regulations could eventually reduce the demand for coal.

Clean Air Act requirements that may directly or indirectly affect our operations include the following:

- *Acid Rain.* Title IV of the Clean Air Act, promulgated in 1990, imposed a two-phase reduction of sulfur dioxide emissions by electric utilities. Phase II became effective in 2000 and applies to all coal-fueled power plants with a capacity of more than 25-megawatts. Generally, the affected power plants have sought to comply with these requirements by switching to lower sulfur fuels, installing pollution control devices, reducing electricity generating levels or purchasing or trading sulfur dioxide emissions allowances. Although we cannot accurately predict the future effect of this Clean Air Act provision on our operations, we believe that implementation of Phase II has been factored into the pricing of the coal market.

- *Particulate Matter.* The Clean Air Act requires the EPA to set national ambient air quality standards, which we refer to as NAAQS, for certain pollutants associated with the combustion of coal, including sulfur dioxide, particulate matter, nitrogen oxides and ozone. Areas that are not in compliance with these standards, referred to as non-attainment areas, must take steps to reduce emissions levels. For example, NAAQS currently exist for particulate matter measuring 10 micrometers in diameter or smaller (PM10) and for fine particulate matter measuring 2.5 micrometers in diameter or smaller (PM2.5), and the EPA revised the PM2.5 NAAQS on December 14, 2012, making it more stringent. The states were required to make recommendations on nonattainment designations for the new NAAQS in late 2013. EPA issued final designations for most areas of the country in 2012 and made some revisions in 2015. Individual states must now identify the sources of emissions and develop emission reduction plans. These plans may be state-specific or regional in scope. Under the Clean Air Act, individual states have up to 12 years from the date of designation to secure emissions reductions from sources contributing to the problem. Future regulation and enforcement of the new PM2.5 standard, as well as future revisions of PM standards, will affect many power plants, especially coal-fueled power plants, and all plants in non-attainment areas.

- *Ozone.* On October 26, 2015, the EPA published a final rule revising the existing primary and secondary NAAQS for ozone, reducing them to 70ppb on an 8-hour average. EPA has yet to make attainment designations for states on this new standard, but significant additional emission control expenditures will likely be required at certain coal-fueled power plants to meet the new stricter NAAQS. Nitrogen oxides, which are a byproduct of coal combustion, are classified as an ozone precursor. As a result, emissions control requirements for new and expanded coal-fueled power plants and industrial boilers will continue to become more demanding in the years ahead. The new standard is subject to pending judicial challenge.

- *NOx SIP Call.* The Nitrogen Oxides State Implementation Plan (NOx SIP) Call program was established by the EPA in October 1998 to reduce the transport of ozone on prevailing winds from the Midwest and South to states in the Northeast, which said that they could not meet federal air quality standards because of migrating pollution. The program was designed to reduce nitrous oxide emissions by one million tons per year in 22 eastern states and the District of Columbia. Phase II reductions were required by May 2007. As a result of the program, many power plants were required to install additional emission control measures, such as selective catalytic reduction devices. Installation of additional emission control measures has made it more costly to operate coal-fueled power plants, which could make coal a less attractive fuel.

- *Interstate Transport.* The EPA finalized the Clean Air Interstate Rule, which we refer to as CAIR, in March 2005. CAIR called for power plants in 28 Eastern states and the District of Columbia to reduce emission levels of sulfur dioxide and nitrous oxide, which could lead to non-attainment of PM2.5 and ozone NAAQS in downwind states (interstate transport), pursuant to a cap and trade program similar to the system now in effect for acid deposition control. In July 2008, in *State of North Carolina v. EPA* and consolidated cases, the U.S. Court of Appeals for the District of Columbia Circuit disagreed with the EPA s reading of the Clean Air Act and vacated CAIR in its entirety. In December 2008, the U.S. Court of Appeals for the District of Columbia Circuit revised its remedy and remanded the rule to the EPA. The EPA proposed a revised transport rule on August 2, 2010 (75 Fed. Reg. 45209) to address attainment of the 1997 ozone NAAQS and the 2006 PM2.5 NAAQS. The rule was finalized as the Cross State Air Pollution Rule (CSAPR) on July 6, 2011, with compliance required for SO2 reductions beginning January 1, 2012 and compliance with NOx reductions required by May 1, 2012. Numerous appeals of the rule were filed and, on August 21, 2012, the Federal Court of Appeals for the District of Columbia Circuit vacated the rule, leaving the EPA to continue implementation of the CAIR. Controls required under the CAIR, especially in conjunction with other rules may have affected the market for coal inasmuch as multiple existing coal fired units were being retired rather than having required controls installed. The U.S. Supreme Court agreed to hear the EPA s appeal of the decision vacating CSAPR and on April 29, 2014, issued an opinion reversing the August 21, 2012 District of Columbia Circuit decision, remanding the case back to the District of Columbia Circuit. The EPA then requested that the court lift the CSAPR stay and toll the CSAPR compliance deadlines by three years. On October 23, 2014, the District of Columbia Circuit granted the EPA s request, and that court later dismissed all pending challenges to the rule on July 28, 2015 but it remanded some state budgets to EPA for further consideration. CSAPR Phase 1 implementation began in 2015, with Phase 2 beginning in 2017. CSAPR generally requires greater reductions that under CAIR. As a result, some coal-fired power plants will be required to install costly pollution controls or shut down which may adversely affect the demand for coal. Finally, in November 2015, EPA proposed an update to the CSAPR to address interstate transport of air pollution under the more recent 2008 ozone NAAQS and the state budgets remanded by the D.C. Circuit. EPA received public comment on the rule in January 2016 and will issue a final rule in the near future. It is likely the final rule will increase the pressure to install controls or shut down units, which may further adversely affect the demand for coal.

- *Mercury.* In February 2008, the U.S. Court of Appeals for the District of Columbia Circuit vacated the EPA s Clean Air Mercury Rule (CAMR) and remanded it to the EPA for reconsideration. In response, the EPA announced an Electric Generating Unit (EGU) Mercury and Air Toxics Standard (MATS) on December 16, 2011. The MATS was finalized April 16, 2012, and required compliance for most plants by 2015. In addition, before the court decision vacating the CAMR, some states had either adopted the CAMR or adopted state-specific rules to regulate mercury emissions from power plants that are more stringent than the CAMR. MATS compliance, coupled with state mercury and air toxics laws and other factors have required many plants to install costly controls, re-fire with natural gas or to retire, which may adversely affect the demand for coal. MATS was challenged in the D.C. Circuit, which upheld the rule on April 15, 2013. Petitioners successfully obtained Supreme Court review, and on June 29, 2015, the Supreme Court issued a 5-4 decision striking down the final rule based on EPA s failure to consider economic costs in determining whether to regulate. The case was remanded to the D.C. Circuit. EPA began reconsideration of costs, proposing to re-issue the final rule in April 2016 based on a finding that those costs still justified regulation, and successfully secured an order from the D.C. Circuit to keep the rule in effect while it completed its rulemaking. Petitioners unsuccessfully sought a stay of the rule in the Supreme Court in February 2016. Therefore, the rule remains in effect until further order of the D.C. Circuit, which will likely hear challenges to EPA s re-issuance of the rule based on its new cost considerations. Hence, MATS will likely continue to impact coal-fueled generation as discussed above for at least the near term, and possibly well into the future.

- *Regional Haze.* The EPA has initiated a regional haze program designed to protect and improve visibility at and around national parks, national wilderness areas and international parks, particularly those located in the southwest and southeast United States. Under the Regional Haze Rule, affected states were required to submit regional haze SIPs by December 17, 2007, that, among other things, were to identify facilities that would have to reduce emissions and comply with stricter emission limitations. The vast majority of states failed to submit their

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plans by December 17, 2007, and the EPA issued a Finding of Failure to Submit plans on January 15, 2009 (74 Fed. Reg. 2392). The EPA had taken no enforcement action against states to finalize implementation plans and was slowly dealing with the state Regional Haze SIPs that were submitted, which resulted in the National Parks Conservation Association commencing litigation in the D.C. Circuit Court of Appeals on August 3, 2012, against the EPA for failure to enforce the rule *(National Parks Conservation Act v. EPA, D.C. Cir)*. Industry groups, including the Utility Air Regulatory Group have intervened *(Utility Air Regulatory Group v. EPA. D.C. Cir 12-1342, 8/6/2012*). EPA ultimately agreed in a consent decree with environmental groups to impose regional haze federal implementation plans (FIPs) or to take action on regional haze SIPs before the agency for 42 states and the District of Columbia. EPA has completed those actions for all but several states in its first planning period (2008-2010). In many eastern states, EPA has allowed states to meet best available control technology (BART) requirements for power plants through compliance with CAIR and CSAPR (a policy under pending litigation). Other states have had BART imposed on a case-by-case basis, and where EPA found SIPs deficient, it disapproved them and issued FIPs. It is possible that EPA may continue to increase the stringency of control requirements imposed under the Regina Haze Program as it moves toward the next planning period. This program may result in additional emissions restrictions from new coal-fueled power plants whose operations may impair visibility at and around federally protected areas. This program may also require certain existing coal-fueled power plants to install additional control measures designed to limit haze-causing emissions, such as sulfur dioxide, nitrogen oxides, volatile organic chemicals and particulate matter. These limitations could affect the future market for coal.

- *New Source Review.* A number of pending regulatory changes and court actions are affecting the scope of the EPA s new source review program, which under certain circumstances requires existing coal-fueled power plants to install the more stringent air emissions control equipment required of new plants. The new source review program is continually revised and such revisions may impact demand for coal nationally, but we are unable to predict the magnitude of the impact.

Climate Change. Carbon dioxide, which is considered to be a greenhouse gas, is a by-product of burning coal. Global climate issues, including with respect to greenhouse gases such as carbon dioxide and the relationship that greenhouse gases may have with perceived global warning, continue to attract significant public and scientific attention. For example, the Fourth and Fifth Assessment Reports of the Intergovernmental Panel on Climate Change have expressed concern about the impacts of human activity, especially from fossil fuel combustion, on global climate issues. As a result of the public and scientific attention, several governmental bodies increasingly are focusing on global climate issues and, more specifically, levels of emissions of carbon dioxide from coal combustion by power plants. Future regulation of greenhouse gas emissions in the United States could occur pursuant to future U.S. treaty obligations, statutory or regulatory changes and the federal, state or local level or otherwise.

Demand for coal also may be impacted by international efforts to reduce emissions from greenhouse gases. For example, in December 2015, representatives of 195 nations reached a landmark climate accord that will, for the first time, commit participating countries to lowering greenhouse gas emissions. Further, the United States and a number of international development banks, such as the World Bank, the European Investment Bank and European Bank for Reconstruction and Development, have announced that they will no longer provide financing for the development of new coal-fueled power plants, subject to very narrow exceptions.

Although the U.S. Congress has considered various legislative proposals that would address global climate issues and greenhouse gas emissions, no such federal proposals have been adopted into law to date. In the absence of U.S. federal legislation on these topics, the U.S. Environmental Protection Agency (the EPA) has been the primary source of federal oversight, although future regulation of greenhouse gases and global climate matters in the United States could occur pursuant to future U.S. treaty obligations, statutory or regulatory changes under the Clean Air Act, federal adoption of a greenhouse gas regulatory scheme or otherwise.

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In 2007, the U.S. Supreme Court held that the EPA has authority under the Clean Air Act to regulate carbon dioxide emissions from automobiles and can decide against regulation only if the EPA determines that carbon dioxide does not significantly contribute to climate change and does not endanger public health or the environment. Although the Supreme Court s holding did not expressly involve the EPA s authority to regulate greenhouse gas emissions from stationary sources, such as coal-fueled power plants, the EPA since has determined on its own that it has the authority to regulate greenhouse gas emissions from power plants, and the EPA has published a formal determination that six greenhouse gases, including carbon dioxide, endanger both the public health and welfare of current and future generations.

In 2014, the EPA proposed a sweeping rule, known as the Clean Power Plan, to cut carbon emissions from existing electric generating units, including coal-fired power plants. A final version of the Clean Power Plan was adopted in August 2015. The final version of the Clean Power Plan aims to reduce carbon dioxide emissions from electrical power generation by 32% within 15 years relative to 2005 levels through reduction of emissions from coal-burning power plants and increased use of renewable energy and energy conservation methods. Under the Clean Power Plan, states are free to reduce emissions by various means and must submit emissions reduction plans to the EPA by September 2016 or, with an approved extension, September 2018. If a state has not submitted a plan by then, the Clean Power Plan authorizes the EPA to impose its own plan on that state. In order to determine a state s goal, the EPA has divided the country into three regions based on connected regional electricity grids. States are to implement their plans by focusing on (i) increasing the generation efficiency of existing fossil fuel plants, (ii) substituting lower carbon dioxide emitting natural gas generation for coal-powered generation and (iii) substituting generation from new zero carbon dioxide emitting renewable sources for fossil fuel powered generation. States are permitted to use regionally available low carbon generation sources when substituting for in-state coal generation and coordinate with other states to develop multi-state plans. Following the adoption, 27 states sued the EPA, claiming that the EPA overstepped its legal authority in adopting the Clean Power Plan. In February 2016, the U.S. Supreme Court ordered the EPA to halt enforcement of the Clean Power Plan until a lower court rules on the lawsuit and until the Supreme Court determines whether or not to hear the case. If the Supreme Court does decide to hear the case, then the stay would remain in effect until the Supreme Court rules. If the Clean Power Plan ultimately is upheld in its current form, it is projected to significantly curtail the construction of new coal-fired power plants and have a materially adverse impact on the demand for coal nationally.

Several U.S. states have enacted legislation establishing greenhouse gas emissions reduction goals or requirements or joined regional greenhouse gas reduction initiatives. Some states also have enacted legislation or regulations requiring electricity suppliers to use renewable energy sources to generate a certain percentage of power or that provide financial incentives to electricity suppliers for using renewable energy sources. For example, nine northeastern states currently are members of the Regional Greenhouse Gas Initiative, which is a mandatory cap-and-trade program established in 2005 to cap regional carbon dioxide emissions from power plants. Six midwestern states and one Canadian province entered into the Midwestern Regional Greenhouse Gas Reduction Accord to establish voluntary regional greenhouse gas reduction targets and develop a voluntary multi-sector cap-and-trade system to help meet the targets, although it has been reported that the members no longer are actively pursuing the group s activities. Lastly, California and Quebec remain members of the Western Climate Initiative, which was formed in 2008 to establish a voluntary regional greenhouse gas reduction goal and develop market-based strategies to achieve emissions reductions, and those two jurisdictions have adopted their own greenhouse gas cap-and-trade regulations. Several states and provinces that originally were members of these organizations, as well as some current members, have joined the new North America 2050 initiative, which seeks to reduce greenhouse gas emissions and create economic opportunities aside from cap-and-trade programs. Any particular state, or any of these or other regional group, may have or adopt in the future rules or policies that cause some users of coal to switch from coal to a lower carbon fuel. There can be no assurance at this time that a carbon dioxide cap-and-trade-program, a carbon tax or other regulatory or policy regime, if implemented by any one or more states or regions in which our customers operate or at the federal level, will not affect the future market for coal in those states or regions and lower the overall demand for coal.

Clean Water Act. The federal Clean Water Act (sometimes shortened to CWA) and corresponding state and local laws and regulations affect coal mining operations by restricting the discharge of pollutants, including dredged and fill materials, into waters of the United States. The Clean Water Act provisions and associated state and federal regulations are complex and subject to amendments, legal challenges and changes in implementation. Recent court decisions and regulatory actions have

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created uncertainty over Clean Water Act jurisdiction and permitting requirements that could variously increase or decrease the cost and time we expend on Clean Water Act compliance.

Clean Water Act requirements that may directly or indirectly affect our operations include the following:

- *Water Discharge.* Section 402 of the Clean Water Act creates a process for establishing effluent limitations for discharges to streams that are protective of water quality standards through the National Pollutant Discharge Elimination System, which we refer to as the NPDES, or an equally stringent program delegated to a state regulatory agency. Regular monitoring, reporting and compliance with performance standards are preconditions for the issuance and renewal of NPDES permits that govern discharges into waters of the United States, especially on selenium, sulfate and specific conductance. Discharges that exceed the limits specified under NPDES permits can lead to the imposition of penalties, and persistent non-compliance could lead to significant penalties, compliance costs and delays in coal production. In addition, the imposition of future restrictions on the discharge of certain pollutants into waters of the United States could increase the difficulty of obtaining and complying with NPDES permits, which could impose additional time and cost burdens on our operations. You should see Item 3, Legal Proceedings, for more information about certain regulatory actions pertaining to our operations. Discharges of pollutants into waters that states have designated as impaired (i.e., as not meeting present water quality standards) are subject to Total Maximum Daily Load, which we refer to as TMDL, regulations. The TMDL regulations establish a process for calculating the maximum amount of a pollutant that a water body can receive while maintaining state water quality standards. Pollutant loads are allocated among the various sources that discharge pollutants into that water body. Mine operations that discharge into water bodies designated as impaired will be required to meet new TMDL allocations. The adoption of more stringent TMDL-related allocations for our coal mines could require more costly water treatment and could adversely affect our coal production.

The Clean Water Act also requires states to develop anti-degradation policies to ensure that non-impaired water bodies continue to meet water quality standards. The issuance and renewal of permits for the discharge of pollutants to waters that have been designated as high quality are subject to anti-degradation review that may increase the costs, time and difficulty associated with obtaining and complying with NPDES permits.

Under the Clean Water Act, citizens may sue to enforce NPDES permit requirements. Beginning in 2012, multiple citizens suits were filed in West Virginia against mine operators for alleged violations of NPDES permit conditions requiring compliance with West Virginia s water quality standards. Some of the lawsuits alleged violations of water quality standards for selenium, whereas others alleged that discharges of conductivity and sulfate were causing violations of West Virginia water quality standards that prohibit adverse effects to aquatic life. The suits sought penalties as well as injunctive relief that would limit future discharges of selenium, conductivity or sulfate through the implementation of expensive treatment technologies. In 2012, the federal district court for the Southern District of West Virginia granted summary judgment to citizens in one such suit alleging violations of the water quality standard for selenium. In 2014, the same court found in another such suit that discharges of conductivity from two West Virginia mines were causing violations of West Virginia s narrative water quality standards. Both cases were resolved prior to any appeal and it is difficult to predict whether such suits will continue to be successful.

Citizens may also sue under the Clean Water Act when pollutants are being discharged without NPDES permits. Beginning in 2013, multiple citizens suits were filed in West Virginia against landowners alleging ongoing discharges of pollutants, including selenium and conductivity, from valley fills at reclaimed mining sites. In each case, the reclamation bond had been released and the mining and NPDES permits had been terminated following the completion of reclamation. While it is difficult to predict the outcome of such suits, any determination that discharges from valley fills require NPDES permits could result in increased compliance costs following the completion of mining at our operations.

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• *Dredge and Fill Permits.* Many mining activities, such as the development of refuse impoundments, fresh water impoundments, refuse fills, valley fills, and other similar structures, may result in impacts to waters of the United States, including wetlands, streams and, in certain instances, man-made conveyances that have a hydrologic connection to such streams or wetlands. Under the Clean Water Act, coal companies are required to obtain a Section 404 permit from the Army Corps of Engineers, which we refer to as the Corps, prior to conducting such mining activities. The Corps is authorized to issue general nationwide permits for specific categories of activities that are similar in nature and that are determined to have minimal adverse effects on the environment. Permits issued pursuant to Nationwide Permit 21, which we refer to as NWP 21, generally authorize the disposal of dredged and fill material from surface coal mining activities into waters of the United States, subject to certain restrictions. Since March 2007, permits under NWP 21 were reissued for a five-year period with new provisions intended to strengthen environmental protections. There must be appropriate mitigation in accordance with nationwide general permit conditions rather than less restricted state-required mitigation requirements, and permit holders must receive explicit authorization from the Corps before proceeding with proposed mining activities. Notwithstanding the additional environmental protections designed in the NWP 21, on July 15, 2009, the Corps proposed to immediately suspend the use of NWP 21 in six Appalachian states, including West Virginia, Kentucky and Virginia where the Company conducts operations. On June 17, 2010, the Corps announced that it had suspended the use of NWP 21 in the same six states although it remained for use elsewhere. In February 2012, the Corps proposed to reissue NWP 21, albeit with significant restrictions on the acreage and length of stream channel that can be filled in the course of mining operations. The Corps decisions regarding the use of NWP 21 does not prevent the Company s operations from seeking an individual permit under § 404 of the CWA, nor does it restrict an operation from utilizing another version of the nationwide permit, NWP 50, authorized for small underground coal mines that must construct fills as part of their mining operations.

The use of nationwide permits to authorize stream impacts from mining activities has been the subject of significant litigation. Refer to Item 3, Legal Proceedings, for more information about certain litigation pertaining to our permits.

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act, which we refer to as RCRA, may affect coal mining operations through its requirements for the management, handling, transportation and disposal of hazardous wastes. Currently, certain coal mine wastes, such as overburden and coal cleaning wastes, are exempted from hazardous waste management. In addition, Subtitle C of RCRA exempted fossil fuel combustion wastes from hazardous waste regulation until the EPA completed a report to Congress and made a determination on whether the wastes should be regulated as hazardous. In its 1993 regulatory determination, the EPA addressed some high volume-low toxicity coal combustion products generated at electric utility and independent power producing facilities, such as coal ash, and left the exemption in place. In May 2000, the EPA concluded that coal combustion products do not warrant regulation as hazardous waste under RCRA and again retained the hazardous waste exemption for these wastes. The EPA also determined that national non-hazardous waste regulations under RCRA Subtitle D are needed for coal combustion products disposed in surface impoundments and landfills and used as mine-fill. In March of 2007 the Office of Surface Mining and the EPA proposed regulations regarding the management of coal combustion products. The EPA concluded that beneficial uses of these wastes, other than for mine-filling, pose no significant risk and no additional national regulations are needed. As long as this exemption remains in effect, it is not anticipated that regulation of coal combustion waste will have any material effect on the amount of coal used by electricity generators. A final rule has not been promulgated. Most state hazardous waste laws also exempt coal combustion products, and instead treat it as either a solid waste or a special waste. Any costs associated with handling or disposal of hazardous wastes would increase our customers operating costs and potentially reduce their ability to purchase coal. In addition, contamination caused by the past disposal of ash can lead to material liability. In another development regarding coal combustion wastes, the EPA conducted an assessment of impoundments and other units that manage residuals from coal combustion and that contain free liquids following a massive coal ash spill in Tennessee in 2008, the EPA contractors conducted site assessments at many impoundments and is requiring appropriate remedial action at any facility that is found to have a unit posing a risk for potential failure. The EPA is posting utility responses to the assessment on its web site as the responses are received. Future regulations resulting from the EPA coal combustion refuse assessments may impact the ability of the Company s utility customers to continue to use coal in their power plants.

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Comprehensive Environmental Response, Compensation and Liability Act. The Comprehensive Environmental Response, Compensation and Liability Act, which we refer to as CERCLA, and similar state laws affect coal mining operations by, among other things, imposing cleanup requirements for threatened or actual releases of hazardous substances that may endanger public health or welfare or the environment. Under CERCLA and similar state laws, joint and several liability may be imposed on waste generators, site owners and lessees and others regardless of fault or the legality of the original disposal activity. Although the EPA excludes most wastes generated by coal mining and processing operations from the hazardous waste laws, such wastes can, in certain circumstances, constitute hazardous substances for the purposes of CERCLA. In addition, the disposal, release or spilling of some products used by coal companies in operations, such as chemicals, could trigger the liability provisions of the statute. Thus, coal mines that we currently own or have previously owned or operated, and sites to which we sent waste materials, may be subject to liability under CERCLA and similar state laws. In particular, we may be liable under CERCLA or similar state laws for the cleanup of hazardous substance contamination at sites where we own surface rights.

Endangered Species. The Endangered Species Act and other related federal and state statutes protect species threatened or endangered with possible extinction. Protection of threatened, endangered and other special status species may have the effect of prohibiting or delaying us from obtaining mining permits and may include restrictions on timber harvesting, road building and other mining or agricultural activities in areas containing the affected species. A number of species indigenous to our properties are protected under the Endangered Species Act or other related laws or regulations. Based on the species that have been identified to date and the current application of applicable laws and regulations, however, we do not believe there are any species protected under the Endangered Species Act that would materially and adversely affect our ability to mine coal from our properties in accordance with current mining plans. We have been able to continue our operations within the existing spatial, temporal and other restrictions associated with special status species. Should more stringent protective measures be applied to threatened, endangered or other special status species or to their critical habitat, then we could experience increased operating costs or difficulty in obtaining future mining permits.

Use of Explosives. Our surface mining operations are subject to numerous regulations relating to blasting activities. Pursuant to these regulations, we incur costs to design and implement blast schedules and to conduct pre-blast surveys and blast monitoring. In addition, the storage of explosives is subject to strict regulatory requirements established by four different federal regulatory agencies. For example, pursuant to a rule issued by the Department of Homeland Security in 2007, facilities in possession of chemicals of interest, including ammonium nitrate at certain threshold levels, must complete a screening review in order to help determine whether there is a high level of security risk such that a security vulnerability assessment and site security plan will be required.

Other Environmental Laws. We are required to comply with numerous other federal, state and local environmental laws in addition to those previously discussed. These additional laws include, for example, the Safe Drinking Water Act, the Toxic Substance Control Act and the Emergency Planning and Community Right-to-Know Act.

Employees

At December 31, 2015, we employed approximately 4,655 full and part-time employees. We believe that our relations with all employees are good.

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Executive Officers

The following is a list of our executive officers, their ages as of February 29, 2016 and their positions and offices during the last five years:

Name	Age	Position
Kenneth D. Cochran	55	Mr. Cochran has served as our Senior Vice President-Operations since August 2012. From May 2011 to August 2012, Mr. Cochran served as Group President of our western operations, which included Thunder Basin Coal Company, the Arch Western Bituminous Group, Arch of Wyoming and the Otter Creek development, and served as President and General Manager of Thunder Basin Coal Company from 2005 to April 2011. Prior to joining Arch Coal in 2005, Mr. Cochran spent 20 years with TXU Corporation. Mr. Cochran currently serves on the boards of Millennium Bulk Terminals-Longview, LLC, Knight Hawk Holdings, LLC, and Tongue River Holding Company.
John T. Drexler	46	Mr. Drexler has served as our Senior Vice President and Chief Financial Officer since 2008 and as our principal accounting officer since January 2016. Mr. Drexler served as our Vice President-Finance and Accounting from 2006 to 2008. From 2005 to 2006, Mr. Drexler served as our Director of Planning and Forecasting. Prior to 2005, Mr. Drexler held several other positions within our finance and accounting department.
John W. Eaves	58	Mr. Eaves was elected Chairman of the Board in April 2015 and currently serves as our Chairman and Chief Executive Officer. Mr. Eaves served as our President and Chief Operating Officer from 2006 until he was elected as our Chief Executive Officer in April 2012. From 2002 to 2006, Mr. Eaves served as our Executive Vice President and Chief Operating Officer. Mr. Eaves currently serves on the boards of COALOGIX, National Mining Association, the Business Roundtable, the American Coalition for Clean Coal Electricity and the Business Council. Mr. Eaves was previously a director of Advanced Emissions Solutions, Inc. and former chairman of the National Coal Council.
Robert G. Jones	59	Mr. Jones has served as our Senior Vice President-Law, General Counsel and Secretary since 2008. Mr. Jones served as Vice President-Law, General Counsel and Secretary from 2000 to 2008.
Allen R. Kelley	55	Mr. Kelley was appointed Vice President-Human Resources in March 2014. From 2008 to March 2014, Mr. Kelley served as our Vice President-Enterprise Risk Management. From 2005 to 2008, Mr. Kelley served as our Director of Internal Audit. Prior to 2005, Mr. Kelley held various finance and accounting positions within the corporate and operations functions of Arch Coal, Inc.
Paul A. Lang	55	Mr. Lang was elected our President and Chief Operating Officer in April 2015. He has served as our Executive Vice President and Chief Operating Officer since April 2012 and as our Executive Vice President-Operations from August 2011 to April 2012. Mr. Lang served as Senior Vice President-Operations from 2006 through August 2011, as President of Western Operations from 2005 through 2006 and President and General Manager of Thunder Basin Coal Company from 1998 to 2005. Mr. Lang is a director of Arch Coal, Inc., Advanced Emissions Solutions, Inc. and Knight Hawk Holdings, LLC. Mr. Lang also serves on the development board of the Mining Department of the Missouri University of Science & Technology, and is chairman of the University of Wyoming s School of Energy Resources Council.
Deck S. Slone	52	Mr. Slone has served as our Senior Vice President-Strategy and Public Policy since June 2012. Mr. Slone served as our Vice President-Government, Investor and Public Affairs from 2008 to June 2012. Mr. Slone served as our Vice President-Investor Relations and Public Affairs from 2001 to 2008. Mr. Slone is a director of Millennium Bulk Terminals-Longview and DKRW Advanced Fuels. In addition, Mr. Slone serves as co-chair of the Coal Utilization Research Council, as National Coal Council Policy Committee chair and as a member of the steering committee of the Consortium for Clean Coal Utilization at Washington University in St. Louis.
John A. Ziegler, Jr.	49	Mr. Ziegler was appointed Chief Commercial Officer in March 2014. Mr. Ziegler served as our Vice President-Human Resources from April 2012 to March 2014. From October 2011 to April 2012, Mr. Ziegler served as our Senior Director-Compensation and Benefits. From 2005 to October 2011 Mr. Ziegler served as Vice President-Contract Administration, President of Sales, then finally Senior Vice President, Sales and Marketing and Marketing Administration. Mr. Ziegler joined Arch Coal in 2002 as Director-Internal Audit. Prior to joining Arch Coal, Mr. Ziegler held various finance and

accounting positions with bioMerieux and Ernst & Young.

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Available Information

We file annual, quarterly and current reports, and amendments to those reports, proxy statements and other information with the Securities and Exchange Commission. You may access and read our filings without charge through the SEC s website, at *sec.gov*. You may also read and copy any document we file at the SEC s Public Reference Room located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference room.

We also make the documents listed above available without charge through our website, *archcoal.com*, as soon as practicable after we file or furnish them with the SEC. You may also request copies of the documents, at no cost, by telephone at (314) 994-2700 or by mail at Arch Coal, Inc., One CityPlace Drive, Suite 300, St. Louis, Missouri, 63141 Attention: Senior Vice President-Strategy and Public Policy. The information on our website is not part of this Annual Report on Form 10-K.

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GLOSSARY OF SELECTED MINING TERMS

Certain terms that we use in this document are specific to the coal mining industry and may be technical in nature. The following is a list of selected mining terms and the definitions we attribute to them.

[redacted]

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ITEM 1A. RISK FACTORS.

Our business involves certain risks and uncertainties. In addition to the risks and uncertainties described below, we may face other risks and uncertainties, some of which may be unknown to us and some of which we may deem immaterial and the following review of important risk factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. If one or more of these risks or uncertainties occur, our business, financial condition or results of operations may be materially and adversely affected.

Risks Related to Our Chapter 11 Cases

As a result of the filing of the Bankruptcy Petitions, we are subject to the risks and uncertainties associated with bankruptcy proceedings, and operating under Chapter 11 may restrict our ability to pursue strategic and operational initiatives.

For the duration of the Chapter 11 Cases (*In re Arch Coal, Inc., et al.*), our operations and our ability to execute our business strategy will be subject to the risks and uncertainties associated with bankruptcy. These risks include:

- our ability to obtain Court approval with respect to motions filed in the Chapter 11 Cases from time to time;
- our ability to comply with and operate under any cash management orders entered by the Court from time to time;
- our ability to comply with our Restructuring Support Agreement and DIP Credit Agreement terms and conditions;
- our ability to confirm and consummate a Chapter 11 plan of reorganization;
- our ability to fund and execute our business plan; and
- our ability to continue as a going concern.

These risks and uncertainties could affect our business and operations in various ways. For example, negative events or publicity associated with the Chapter 11 Cases could adversely affect our relationships with our suppliers, customers and employees.   In particular, critical vendors may determine not to do business with us due to our Chapter 11 filing and we may not be successful in securing alternative sources. Also, transactions outside the ordinary course of business are subject to the prior approval of the Court, which may limit our ability to respond timely to certain events or take advantage of opportunities. Because of the risks and uncertainties associated with the Chapter 11 Cases, we cannot predict or quantify the ultimate impact that events occurring during the Chapter 11 reorganization process may have on our business, financial condition and results of operations, and there is no certainty as to our ability to continue as a going concern.

Under Chapter 11, transactions outside the ordinary course of business are subject to the prior approval of the Court, which may limit our ability to respond in a timely manner to certain events or take advantage of certain opportunities. Additionally, the terms of the DIP Credit Agreement require us to comply with certain financial maintenance covenants, including (i) maximum capital expenditures and (ii) minimum unrestricted cash and cash equivalents. The DIP Credit Agreement also contains customary affirmative and negative covenants for debtor-in-possession financings, which include restrictions on (i) indebtedness, (ii) liens and guaranties, (iii) liquidations, mergers, consolidations, acquisitions, (iv) disposition of assets or subsidiaries, (v) affiliate transactions, (vi) creation or ownership of certain subsidiaries, partnerships and joint ventures, (vii) continuation of or change in business, (viii) restricted payments, (ix) sanctions and anti-corruption matters, (x) no restriction in agreements on dividends or certain loans, (xi) loans and investments, (xii) transactions with respect to Bonding Subsidiaries and (xiii) hedging transactions. In addition, the DIP Credit Agreement contains milestones relating to the Chapter 11 Cases. Our ability to comply with these provisions may be affected by events beyond our control and our failure to comply could result in an event of default under the DIP Credit Agreement.

Trading in our securities during the pendency of the Chapter 11 Cases is highly speculative and poses substantial risks. We expect that the existing common stock of the Company will be extinguished and existing equity holders will not receive consideration in respect of their equity interests.

On the Petition Date, the NYSE determined that the Company s stock (NYSE: ACI) was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards and trading in the Company s common stock was suspended on January 11, 2016. We expect that the existing common stock of the Company will be extinguished upon the

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Company s emergence from Chapter 11 and existing equity holders will not receive consideration in respect of their equity interests. Following delisting from the NYSE, Arch common stock has been traded over the counter in the Pink Sheets, but this may not always be the case. The delisting by the NYSE could result in significantly lower trading volumes and reduced liquidity for investors seeking to buy or sell shares of our common stock.

Arch s Restructuring Support Agreement provides that, upon the Company s emergence from Chapter 11, Arch s existing stock will be cancelled and the senior lenders will receive the substantial majority of the new stock in the reorganized Arch. If a plan of reorganization is approved in the Chapter 11 Cases, it is likely that our existing common stock will be extinguished, and existing equity holders will likely not receive consideration in respect of their existing equity interests.

The pursuit of the Chapter 11 Cases has consumed and will continue to consume a substantial portion of the time and attention of our management, which may have an adverse effect on our business and results of operations, and we may face increased levels of employee attrition.

While the Chapter 11 Cases continue, our management will be required to spend a significant amount of time and effort focusing on the cases. This diversion of attention may materially adversely affect the conduct of our business, and, as a result, on our financial condition and results of operations, particularly if the Chapter 11 Cases are protracted.

During the pendency of the Chapter 11 Cases, our employees will face considerable distraction and uncertainty and we may experience increased levels of employee attrition. A loss of key personnel or material erosion of employee morale could have a materially adverse effect on our ability to meet customer expectations, thereby adversely affecting our business and results of operations. The failure to retain or attract members of our management team and other key personnel could impair our ability to execute our strategy and implement operational initiatives, thereby having a material adverse effect on our financial condition and results of operations.

If we are not able to obtain confirmation of a Chapter 11 plan of reorganization, or if current financing is insufficient or exit financing is not available, we could be required to seek a sale of the Company or certain of its material assets pursuant to Section 363 of the Bankruptcy Code or liquidate under Chapter 7 of the Bankruptcy Code.

In order to successfully emerge from Chapter 11 bankruptcy protection, we must obtain confirmation of a Chapter 11 plan of reorganization by the Court. If confirmation by the Court does not occur, we could be forced to sell the Company or certain of its material assets pursuant to Section 363 of the Bankruptcy Code or liquidate under Chapter 7 of the Bankruptcy Code.

There can be no assurance that our current cash position and amounts of cash from future operations will be sufficient to fund operations. In the event that we do not have sufficient cash to meet our liquidity requirements, and our current financing is insufficient or exit financing is not available, we may be required to seek additional financing. There can be no assurance that such additional financing would be available, or, if available, would be available on acceptable terms. Failure to secure any necessary exit financing or additional financing would have a material adverse effect on our operations and ability to continue as a going concern.

Our post-bankruptcy capital structure has yet to be determined, and any changes to our capital structure may have a material adverse effect on existing debt and security holders.

Our capital structure will be set pursuant to a plan of reorganization that requires Court approval. Any reorganization of our capital structure may include exchanges of new debt or equity securities for our existing debt and equity securities, and such new debt or equity securities may be issued at different interest rates, payment schedules and maturities than our existing creditors. The success of a reorganization through any such exchanges or modifications will depend on approval by the Court and the willingness of existing debt and security holders to agree to the exchange or modification, and there can be no guarantee of success. If such exchanges or modifications are successful, holders of our debt may find their holdings no longer have any value or are materially reduced in value, or they may be converted to equity and be diluted or may be modified or replaced by debt with a principal amount that is less than the outstanding principal amount, longer maturities and reduced interest rates. There can be no assurance that any new debt or equity securities will maintain their value at the time of issuance.

Any plan of reorganization that we may implement will be based in large part upon assumptions and analyses developed by us. If these assumptions and analyses prove to be incorrect, or adverse market conditions persist or worsen, our plan may be unsuccessful in its execution.

Any plan of reorganization that we may implement will affect both our capital structure and the ownership, structure and operation of our businesses and will reflect assumptions and analyses based on our experience and perception of historical trends, current conditions and expected future developments, as well as other factors that we consider appropriate under the circumstances. Whether actual future results and developments will be consistent with our expectations and assumptions depends on a number of factors, including but not limited to (i) our ability to substantially change our capital structure; (ii) our ability to obtain adequate liquidity and financing sources; (iii) our ability to maintain customers confidence in our viability as a continuing entity and to attract and retain sufficient business from them; (iv) our ability to retain key employees, and (v) the overall strength and stability of general economic conditions of the financial and coal industries, both in the U.S. and in global markets. The failure of any of these factors could materially adversely affect the successful reorganization of our businesses.

In addition, any plan of reorganization will rely upon financial projections, including with respect to revenues, EBITDA, capital expenditures, debt service and cash flow. Financial forecasts are necessarily speculative, and it is likely that one or more of the assumptions and estimates that are the basis of these financial forecasts will not be accurate. In our case, the forecasts will be even more speculative than normal, because they may involve fundamental changes in the nature of our capital structure. Accordingly, we expect that our actual financial condition and results of operations will differ, perhaps materially, from what we have anticipated. Consequently, there can be no assurance that the results or developments contemplated by any plan of reorganization we may implement will occur or, even if they do occur, that they will have the anticipated effects on us and our subsidiaries or our businesses or operations. The failure of any such results or developments to materialize as anticipated could materially adversely affect the successful execution of any plan of reorganization.

As a result of the Chapter 11 Cases, realization of assets and liquidation of liabilities are subject to uncertainty, and our historical financial information will not be indicative of our future financial performance.

Our capital structure will likely be significantly altered under any plan of reorganization ultimately confirmed by the Court. Under fresh-start reporting rules that may apply to us upon the effective date of a plan of reorganization, our assets and liabilities would be adjusted to fair values and our accumulated deficit would be restated to zero. Accordingly, if fresh-start reporting rules apply, our financial condition and results of operations following our emergence from Chapter 11 would not be comparable to the financial condition and results of operations reflected in our historical financial statements. Further, a plan of reorganization could materially change the amounts and classifications reported in our consolidated historical financial statements, which do not give effect to any adjustments to the carrying value of assets or amounts of liabilities that might be necessary as a consequence of confirmation of a plan of reorganization.

While operating under the protection of the Bankruptcy Code, and subject to Court approval or otherwise as permitted in the normal course of business, we may sell or otherwise dispose of assets and liquidate or settle liabilities for amounts other than those reflected in our consolidated financial statements. In connection with the Chapter 11 Cases and the development of a plan of reorganization, it is also possible that additional restructuring and related charges may be identified and recorded in future periods. Such sales, disposals, liquidations, settlements or charges could be material to our consolidated financial position and results of operations in any given period.

We may be unable to comply with restrictions imposed by our DIP Credit Agreement, our Securitization Facility and other financing arrangements.

The agreements governing our outstanding financing arrangements impose a number of restrictions on us. For example, the terms of our credit facilities, leases and other financing arrangements contain financial and other covenants that create limitations on our ability to borrow the full amount under our credit facilities, effect acquisitions or dispositions and

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incur additional debt and require us to maintain minimum levels of liquidity and various financial ratios and comply with various other financial covenants. Specifically, the terms of the DIP Credit Agreement require us to comply with certain financial maintenance covenants, including (i) maximum capital expenditures and (ii) minimum unrestricted cash and cash equivalents. The DIP Credit Agreement also contains customary affirmative and negative covenants for debtor-in-possession financings, which include restrictions on (i) indebtedness, (ii) liens and guaranties, (iii) liquidations, mergers, consolidations, acquisitions, (iv) disposition of assets or subsidiaries, (v) affiliate transactions, (vi) creation or ownership of certain subsidiaries, partnerships and joint ventures, (vii) continuation of or change in business, (viii) restricted payments, (ix) sanctions and anti-corruption matters, (x) no restriction in agreements on dividends or certain loans, (xi) loans and investments, (xii) transactions with respect to Bonding Subsidiaries and (xiii) hedging transactions. In addition, the DIP Credit Agreement contains milestones relating to the Chapter 11 Cases. Our ability to comply with these provisions may be affected by events beyond our control and our failure to comply could result in an event of default under the DIP Credit Agreement, the Securitization Facility or our other financing arrangements.

Risks Related to Our Operations

Coal prices are subject to change based on a number of factors and coal prices are currently experiencing an historic level of depression. If coal prices remain depressed, or if there is a further decline in prices, it could materially and adversely affect our profitability and the value of our coal reserves.

Our profitability and the value of our coal reserves depend upon the prices we receive for our coal. The contract prices we may receive in the future for coal depend upon factors beyond our control, including the following:

- the domestic and foreign supply of and demand for coal;
- the domestic and foreign demand for electricity and steel;
- the quantity and quality of coal available from competitors;
- competition for production of electricity from non-coal sources, including the price and availability of alternative fuels;
- domestic and foreign air emission standards for coal-fueled power plants and the ability of coal-fueled power plants to meet these standards;
- adverse weather, climatic or other natural conditions, including unseasonable weather patterns;
- domestic and foreign economic conditions, including economic slowdowns and the exchange rate of U.S. dollars for foreign currency;
- domestic and foreign legislative, regulatory and judicial developments, environmental regulatory changes or changes in energy policy and energy conservation measures that would adversely affect the coal industry, such as legislation limiting carbon emissions or providing for increased funding and incentives for alternative energy sources;

- the proximity to, capacity of and cost of transportation and port facilities; and
- market price fluctuations for sulfur dioxide or nitric oxide emission allowances.

Due to a number of factors outside our control, including decelerating demand for coal used in electricity (due to low natural gas prices and regulations), an oversupplied market and increased competition particularly from non-U.S. suppliers taking advantage of a strong dollar, we have experienced a sustained and significant downturn in coal pricing over the last several years. The global metallurgical coal market remains challenged and has shown no meaningful improvement over the

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last several years. We are also experiencing higher than normal uncommitted volumes due to prolonged, depressed market conditions. Pricing may be adversely affected or we may need to reduce production as a result of our uncommitted volume levels. If coal prices remain depressed, or if there is a further decline in the prices we receive for our future coal sales contracts, it could materially and adversely affect us by decreasing our profitability and the value of our coal reserves.

Unfavorable economic and market conditions have adversely affected and may continue to affect our revenues and profitability.

Our profitability depends, in large part, on conditions in the markets that we serve, which fluctuate in response to various factors beyond our control. The prices at which we sell our coal are largely dependent on prevailing market prices. We have experienced significant price pressure over the past several years, and we expect that the price for our coal will continue to be depressed, as the demand for, and price of, coal remains subject to pressure for a variety of reasons, including reductions in domestic and international demand for metallurgical and thermal coal. These conditions, among other factors, have led to our filing of the Bankruptcy Petitions.

Global economic downturns have also had and in the future could have a negative impact on us. These conditions have, in the past, led to extreme volatility of security prices, severely limited liquidity and credit availability, and resulted in declining valuations of assets. If there are downturns in economic conditions, our customers and our businesses, financial conditions or results of operations could be adversely affected. During unfavorable economic conditions we are focused on cost control and capital discipline, but there can be no assurance that these actions, or any other actions that we may take, will be sufficient to offset any adverse effect these conditions may have on our business, financial condition or results of operations.

Competition could put downward pressure on coal prices and, as a result, materially and adversely affect our revenues and profitability.

We compete with numerous other domestic and foreign coal producers for domestic and international sales. Overcapacity and increased production within the coal industry, both domestically and internationally, and decelerating steel demand in China have, and could further, materially reduce coal prices and therefore materially reduce our revenues and profitability. In addition, our ability to ship our coal to international customers depends on port capacity, which is limited. Increased competition within the coal industry for international sales could result in us not being able to obtain throughput capacity at port facilities, or the rates for such throughput capacity to increase to a point where it is not economically feasible to export our coal.

In addition to competing with other coal producers, we compete generally with producers of other fuels, such as natural gas. Natural gas pricing has declined significantly in recent years. The decline in the price of natural gas has caused demand for coal to decrease and adversely affect the price of our coal. Sustained periods of low natural gas prices have also contributed to utilities phasing out or closing existing coal-fired power plants and continued low prices could reduce construction of any new coal-fired power plants. This trend has, and could continue to have, a material adverse effect on demand and prices for our coal.

Any change in the coal consumption of electric power generators could result in less demand and lower prices for coal, which could materially and adversely affect our revenues and results of operations.

Thermal coal accounted for 95% of our coal sales by volume during 2015. The majority of these sales were to electric power generators. The amount of coal consumed for electric power generation is affected primarily by the overall demand for electricity, the availability, quality and price of competing fuels for power generation and governmental regulations. Gas-fueled generation has the potential to displace coal-fueled generation, particularly from older, less efficient coal-powered generators and this has occurred to date. We expect that many of the new power plants needed in the United States to meet increasing demand for electricity generation will be fueled by natural gas because gas-fired plants are cheaper to construct and permits to construct these plants are easier to obtain as natural gas is seen as having a lower environmental impact than coal-fueled generation. In addition, state and federal mandates for increased use of electricity from renewable energy sources also have an impact on the market for our coal. Several states have enacted legislative mandates requiring electricity suppliers to use renewable energy sources to generate a certain percentage of power. There have been numerous proposals to establish a similar uniform, national standard although none of these proposals have been enacted to date. Possible advances in technologies and incentives, such as tax credits, to enhance the economics of renewable energy sources could make these sources more competitive with coal. Any reduction in the amount of coal consumed by electric power generators could reduce the price of coal that we mine and sell, thereby reducing our revenues and materially and adversely affecting our business and results of operations.

Our coal mining operations are subject to operating risks that are beyond our control, which could result in materially increased operating expenses and decreased production levels and could materially and adversely affect our profitability.

We mine coal at underground and surface mining operations. Certain factors beyond our control, including those listed below, could disrupt our coal mining operations, adversely affect production and shipments and increase our operating costs:

- poor mining conditions resulting from geological, hydrologic or other conditions that may cause instability of highwalls or spoil piles or cause damage to nearby infrastructure or mine personnel;
- a major incident at the mine site that causes all or part of the operations of the mine to cease for some period of time;
- mining, processing and plant equipment failures and unexpected maintenance problems;
- adverse weather and natural disasters, such as heavy rains or snow, flooding and other natural events affecting operations, transportation or customers;
- unexpected or accidental surface subsidence from underground mining;
- accidental mine water discharges, fires, explosions or similar mining accidents;
- delays or closures by third-party transportation on coal shipments; and
- competition and/or conflicts with other natural resource extraction activities and production within our operating areas, such as coalbed methane extraction or oil and gas development.

If any of these conditions or events occurs, particularly at our Black Thunder mining complex, which accounted for approximately 78% of the coal volume we sold in 2015, our coal mining operations may be disrupted and we could experience a delay or halt of production or shipments or our operating costs could increase significantly. In addition, if our insurance coverage is limited or excludes certain of these conditions or events, then we may not be able to recover any of the losses we may incur as a result of such conditions or events, some of which may be substantial.

A decline in demand for metallurgical coal would limit our ability to sell our coal into higher-priced metallurgical markets and could substantially affect our business.

Portions of our coal reserves possess quality characteristics that enable us to mine, process and market them as either metallurgical coal or high quality steam coal, depending on the prevailing conditions in the metallurgical and steam coal markets. We decide whether to mine, process and market these coals as metallurgical or steam coal based on management s assessment as to which market is likely to provide us with a higher margin. We consider a number of factors when making this assessment, including the difference between the current and anticipated future market prices of steam coal and metallurgical coal and the increased costs incurred in producing coal for sale in the metallurgical market instead of the steam market. The global metallurgical coal market remains challenged and has shown no meaningful improvement over the last several quarters, due to, among other things, reduced steel production. A further decline in, or prices remaining depressed in, the metallurgical market relative to the steam market could cause us, as well as our competitors, to shift coal from the metallurgical market to the steam market, thereby reducing our revenues and profitability and increasing the availability of coal to customers in the steam market.

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Our inability to acquire additional coal reserves or our inability to develop coal reserves in an economically feasible manner may adversely affect our business.

Our profitability depends substantially on our ability to mine and process, in a cost-effective manner, coal reserves that possess the quality characteristics desired by our customers. As we mine, our coal reserves decline. As a result, our future success depends upon our ability to acquire additional coal that is economically recoverable. If we fail to acquire or develop additional coal reserves, our existing reserves will eventually be depleted. We may not be able to obtain replacement reserves when we require them. If available, replacement reserves may not be available at favorable prices, or we may not be capable of mining those reserves at costs that are comparable with our existing coal reserves. Our ability to obtain coal reserves in the future could also be limited by the availability of cash we generate from our operations or available financing, restrictions under our existing or future financing arrangements (including under our DIP Credit Agreement), competition from other coal producers, the lack of suitable acquisition or lease-by-application, or LBA, opportunities or the inability to acquire coal properties or LBAs on commercially reasonable terms, and restrictions on making acquisitions as a result of our Chapter 11 Cases. If we are unable to acquire replacement reserves, our future production may decrease significantly and our operating results may be negatively affected. In addition, we may not be able to mine future reserves as profitably as we do at our current operations.

On January 15, 2016, the federal government ordered a moratorium on new leases for coal mined from federal lands as part of a review of the government s management of federally-owned coal. The delay in the LBA process caused by the moratorium could prevent us from obtaining replacement reserves when we require them. Also, the outcome of the government s review is uncertain and could have a material and adverse impact on our business in any number of ways including by limiting our ability to mine reserves under ongoing or future applications, by increasing the costs or timeframe associated with obtaining leases under the LBA program, by making it uneconomical for us to participate in the programs or by preventing us from obtaining replacement reserves if the LBA program were to be terminated.

Inaccuracies in our estimates of our coal reserves could result in decreased profitability from lower than expected revenues or higher than expected costs.

Our future performance depends on, among other things, the accuracy of our estimates of our proven and probable coal reserves. We base our estimates of reserves on engineering, economic and geological data assembled, analyzed and reviewed by internal and third-party engineers and consultants. We update our estimates of the quantity and quality of proven and probable coal reserves annually to reflect the production of coal from the reserves, updated geological models and mining recovery data, the tonnage contained in new lease areas acquired and estimated costs of production and sales prices. There are numerous factors and assumptions inherent in estimating the quantities and qualities of, and costs to mine, coal reserves, including many factors beyond our control, including the following:

- quality of the coal;
- geological and mining conditions, which may not be fully identified by available exploration data and/or may differ from our experiences in areas where we currently mine;
- the percentage of coal ultimately recoverable;
- the assumed effects of regulation, including the issuance of required permits, taxes, including severance and excise taxes and royalties, and other payments to governmental agencies;

- assumptions concerning the timing for the development of the reserves;
- assumptions concerning physical access to the reserves; and
- assumptions concerning equipment and productivity, future coal prices, operating costs, including for critical supplies such as fuel, tires and explosives, capital expenditures and development and reclamation costs.

As a result, estimates of the quantities and qualities of economically recoverable coal attributable to any particular group of properties, classifications of reserves based on risk of recovery, estimated cost of production, and estimates of future net cash flows expected from these properties as prepared by different engineers, or by the same engineers at different times, may vary materially due to changes in the above factors and assumptions. Actual production recovered from identified reserve

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areas and properties, and revenues and expenditures associated with our mining operations, may vary materially from estimates. Any inaccuracy in our estimates related to our reserves could result in decreased profitability from lower than expected revenues and/or higher than expected costs.

Failure to obtain or renew surety bonds on acceptable terms could affect our ability to secure reclamation and coal lease obligations and, therefore, our ability to mine or lease coal, and a loss or reduction in our ability to self-bond could have a material adverse effect on our business and results of operations.

Federal and state laws require us to obtain surety bonds or post letters of credit to secure performance or payment of certain long-term obligations, such as mine closure or reclamation costs, federal and state workers compensation costs, coal leases and other obligations. The costs of surety bonds have fluctuated in recent years while the market terms of such bonds have generally become more unfavorable to mine operators. These changes in the terms of the bonds have been accompanied at times by a decrease in the number of companies willing to issue surety bonds. Because we are required by state and federal law to have these bonds in place before mining can commence or continue, our failure to maintain surety bonds, letters of credit or other guarantees or security arrangements would materially and adversely affect our ability to mine or lease coal. We use self-bonding to secure performance of certain obligations in Wyoming. Self-bonding allows us to mine without posting any other third party financial assurance such as a surety bond or letter of credit. As of December 31, 2015, we have self-bonded an aggregate of approximately $485.5 million. The Land Quality Division of the Wyoming Department of Environmental Quality periodically re-evaluates the amount of the bond, so this amount is subject to change.

On February 29, 2016, the Bankruptcy Court approved a stipulation between certain of our operating subsidiaries and the State of Wyoming, pursuant to which those subsidiaries granted Wyoming a $75 million superpriority claim to support the self-bonded obligations and agreed to substitute approximately $17 million of the self-bonds with financial assurance in the form of third-party collateral support. In exchange, Wyoming agreed to a stay of any proceedings related to the subsidiaries self-bonded status and that, so long as the stipulation is effective, Wyoming will not seek additional collateral in respect of the self-bonds, take certain other adverse actions with respect to the subsidiaries mining permits or licenses in Wyoming or seek to enforce the subsidiaries obligations to make payments in respect of the self-bonds. The stipulation is effective until the earlier of May 1, 2017 and the date upon which a plan of reorganization in the Chapter 11 Cases is approved and becomes effective, subject to certain early termination events.

Our self-bonding obligations may increase as our bankruptcy process continues, and, upon our emergence from bankruptcy or otherwise, we may not continue to qualify to self-bond or self-bonding programs may be terminated. Alternative forms of financial assurance such as surety bonds and letters of credit may not be available to us. To the extent we are unable to maintain our current level of self-bonding, due to legislative or regulatory changes or changes in our financial condition, our costs would increase and it could have a material adverse effect on our financial condition and results of operations, as well as cast substantial doubt on our ability to continue as a going concern.

Increases in the costs of mining and other industrial supplies, including steel-based supplies, diesel fuel and rubber tires, or the inability to obtain a sufficient quantity of those supplies, could negatively affect our operating costs or disrupt or delay our production.

Our coal mining operations use significant amounts of steel, diesel fuel, explosives, rubber tires and other mining and industrial supplies. The cost of roof bolts we use in our underground mining operations depends on the price of scrap steel. We also use significant amounts of diesel fuel and tires for trucks and other heavy machinery, particularly at our Black Thunder mining complex. If the prices of mining and other industrial supplies, particularly steel based supplies, diesel fuel and rubber tires, increase, our operating costs could be negatively affected. In addition, if we are unable to procure these supplies, our coal mining operations may be disrupted or we could experience a delay or halt in our production.

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Disruptions in the quantities of coal produced by our contract mine operators or purchased from other third parties could temporarily impair our ability to fill customer orders or increase our operating costs.

We use independent contractors to mine coal at certain of our mining complexes, including select operations in our Appalachian segment. In addition, we purchase coal from third parties that we sell to our customers. Operational difficulties at contractor-operated mines or mines operated by third parties from whom we purchase coal, changes in demand for contract miners from other coal producers and other factors beyond our control could affect the availability, pricing, and quality of coal produced for or purchased by us. Disruptions in the quantities of coal produced for or purchased by us could impair our ability to fill our customer orders or require us to purchase coal from other sources in order to satisfy those orders. If we are unable to fill a customer order or if we are required to purchase coal from other sources in order to satisfy a customer order, we could lose existing customers and our operating costs could increase.

Our profitability depends upon the long-term coal supply agreements we have with our customers. Changes in purchasing patterns in the coal industry could make it difficult for us to extend our existing long-term coal supply agreements or to enter into new agreements in the future.

The success of our businesses depends on our ability to retain our current customers, renew our existing customer contracts and solicit new customers. Our ability to do so generally depends on a variety of factors, including the quality and price of our products, our ability to market these products effectively, our ability to deliver on a timely basis and the level of competition that we face. If current customers do not honor current contract commitments, or if they terminate agreements or exercise *force majeure* provisions allowing for the temporary suspension of performance, our revenues will be adversely affected. Changes in the coal industry may cause some of our customers not to renew, extend or enter into new long-term coal supply agreements or enter into agreements to purchase fewer tons of coal or on different terms or prices than in the past. In addition, uncertainty caused by federal and state regulations, including the Clean Air Act, could deter our customers from entering into long-term coal supply agreements. Also, the availability and price of competing fuels, such as natural gas, could influence the volume of coal a customer is willing to purchase under contract.

Our long-term coal supply agreements typically contain *force majeure* provisions allowing the parties to temporarily suspend performance during specified events beyond their control. Most of our long-term coal supply agreements also contain provisions requiring us to deliver coal that satisfies certain quality specifications, such as heat value, sulfur content, ash content, hardness and ash fusion temperature. These provisions in our long-term coal supply agreements could result in negative economic consequences to us, including price adjustments, purchasing replacement coal in a higher-priced open market, the rejection of deliveries or, in the extreme, contract termination. Our profitability may be negatively affected if we are unable to seek protection during adverse economic conditions or if we incur financial or other economic penalties as a result of these provisions of our long-term supply agreements. For more information about our long-term coal supply agreements, you should see the section entitled Long-Term Coal Supply Arrangements under Item 1.

Our ability to collect payments from our customers could be impaired if their creditworthiness deteriorates and our financial position could be materially and adversely effected by the bankruptcy of any of our significant customers.

Our ability to receive payment for coal sold and delivered depends on the continued creditworthiness of our customers. If we determine that a customer is not creditworthy, we may be able to withhold delivery under the customer s coal sales contract. If this occurs, we may decide to sell the customer s coal on the spot market, which may be at prices lower than the contracted price, or we may be unable to sell the coal at all. Furthermore, the bankruptcy of any of our significant customers could materially and adversely affect our financial position.

In addition, our customer base may change with deregulation as utilities sell their power plants to their non-regulated affiliates or third parties that may be less creditworthy, thereby increasing the risk we bear for customer payment default. Some power plant owners may have credit ratings that are below investment grade, or may become below investment grade after we enter into contracts with them. In addition, competition with other coal suppliers could force us to extend credit to customers and on terms that could increase the risk of payment default. Customers in other countries may also be subject to other

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pressures and uncertainties that may affect their ability to pay, including trade barriers, exchange controls and local economic and political conditions.

A defect in title or the loss of a leasehold interest in certain property could limit our ability to mine our coal reserves or result in significant unanticipated costs.

We conduct a significant part of our coal mining operations on properties that we lease. A title defect or the loss of a lease could adversely affect our ability to mine the associated coal reserves. We may not verify title to our leased properties or associated coal reserves until we have committed to developing those properties or coal reserves. We may not commit to develop property or coal reserves until we have obtained necessary permits and completed exploration. As such, the title to property that we intend to lease or coal reserves that we intend to mine may contain defects prohibiting our ability to conduct mining operations. Similarly, our leasehold interests may be subject to superior property rights of other third parties. In order to conduct our mining operations on properties where these defects exist, we may incur unanticipated costs. In addition, some leases require us to produce a minimum quantity of coal and require us to pay minimum production royalties. Our inability to satisfy those requirements may cause the leasehold interest to terminate.

The availability, reliability and cost-effectiveness of transportation facilities and fluctuations in transportation costs could affect the demand for our coal or impair our ability to supply coal to our customers.

We depend upon barge, ship, rail, truck and belt transportation systems, as well as seaborne vessels and port facilities, to deliver coal to our customers. Disruptions in transportation services due to weather-related problems, mechanical difficulties, strikes, lockouts, bottlenecks, route closures and other events beyond our control could impair our ability to supply coal to our customers. Since we do not have long-term contracts with all transportation providers we utilize, decreased performance levels over longer periods of time could cause our customers to look to other sources for their coal needs. In addition, increases in transportation costs, including the price of gasoline and diesel fuel, could make coal a less competitive source of energy when compared to alternative fuels or could make coal produced in one region of the United States less competitive than coal produced in other regions of the United States or abroad. If we experience disruptions in our transportation services or if transportation costs increase significantly and we are unable to find alternative transportation providers, our coal mining operations may be disrupted, we could experience a delay or halt of production or our profitability could decrease significantly.

In addition, a growing portion of our coal sales in recent years has been into export markets, and we are actively seeking additional international customers. Our ability to maintain and grow our export sales revenue and margins depends on a number of factors, including the existence of sufficient and cost-effective export terminal capacity for the shipment of coal to foreign markets. At present, there is limited terminal capacity for the export of coal into foreign markets. Our access to existing and future terminal capacity may be adversely affected by regulatory and permit requirements, environmental and other legal challenges, public perceptions and resulting political pressures, operational issues at terminals and competition among domestic coal producers for access to limited terminal capacity, among other factors. If we are unable to maintain terminal capacity, or are unable to access additional future terminal capacity for the export of our coal on commercially reasonable terms, or at all, our results could be materially and adversely affected.

From time to time we enter into take or pay contracts for rail and port capacity related to our export sales. These contracts require us to pay for a minimum quantity of coal to be transported on the railway or through the port regardless of whether we sell and ship any coal. If we fail to acquire sufficient export sales to meet our minimum obligations under these contracts we are still obligated to make payments to the railway or port facility, which could have a negative impact on our cash flows, profitability and results of operations.

The loss of, or significant reduction in, purchases by our largest customers could adversely affect our profitability.

For the year ended December 31, 2015, we derived approximately 18% of our total coal revenues from sales to our three largest customers and approximately 39% of our total coal revenues from sales to our ten largest customers. We are currently discussing the extension of coal sales agreements with some of these customers. However, we may be unsuccessful in obtaining coal supply agreements with those customers, and some or all of these customers could discontinue purchasing coal from us. If any of those customers, particularly any of our three largest customers, was to significantly reduce the quantities of coal it purchases from us, or if we are unable to sell coal to those customers on terms as favorable to us, it may have an adverse impact on the results of our business.

We may incur losses as a result of certain marketing, trading and asset optimization strategies.

We seek to optimize our coal production and leverage our knowledge of the coal industry through a variety of marketing, trading and other asset optimization strategies. We maintain a system of complementary processes and controls designed to monitor and control our exposure to market and other risks as a consequence of these strategies. These processes and controls seek to balance our ability to profit from certain marketing, trading and asset optimization strategies with our exposure to potential losses. While we employ a variety of risk monitoring and mitigation techniques, those techniques and accompanying judgments cannot anticipate every potential outcome or the timing of such outcomes. In addition, the processes and controls that we use to manage our exposure to market and other risks resulting from these strategies involve assumptions about the degrees of correlation or lack thereof among prices of various assets or other market indicators. These correlations may change significantly in times of market turbulence or other unforeseen circumstances. As a result, we may experience volatility in our earnings as a result of our marketing, trading and asset optimization strategies.

International growth in our operations adds new and unique risks to our business.

We have recently opened offices in China, Singapore and the United Kingdom. The international expansion of our operations increases our exposure to country and currency risks. In addition, our international offices are selling our coal to new customers and customers in new countries, whose business practices and reputations are not as well known to us. We are also challenged by political risks by expanding internationally, including the potential for expropriation of assets and limits on the repatriation of earnings. In the event that we are unable to effectively manage these new risks, our results of operations, financial position or cash flow could be adversely affected by these activities.

If we sustain cyber attacks or other security breaches that disrupt our operations, or that result in the unauthorized release of proprietary or confidential information, we could be exposed to significant liability, reputational harm, loss of revenue, increased costs or other risks.

We may be subject to security breaches which could result in unauthorized access to our facilities or to information we are trying to protect. Unauthorized physical access to one or more of our facilities or locations, or electronic access to our proprietary or confidential information could result in, among other things, unfavorable publicity, litigation by parties affected by such breach, disruptions to our operations, loss of customers, and financial obligations for damages related to the theft or misuse of such information, any of which could have a substantial impact on our results of operations, financial condition or cash flows.

Risks Related to Environmental, Other Regulations and Legislation

Extensive environmental regulations, including existing and potential future regulatory requirements relating to air emissions, affect our customers and could reduce the demand for coal as a fuel source and cause coal prices and sales of our coal to materially decline.

Coal contains impurities, including but not limited to sulfur, mercury, chlorine and other elements or compounds, many of which are released into the air when coal is burned. The operations of our customers are subject to extensive environmental regulation particularly with respect to air emissions. For example, the federal Clean Air Act and similar state and local laws extensively regulate the amount of sulfur dioxide, particulate matter, nitrogen oxides, and other compounds emitted into the air from electric power plants, which are the largest end-users of our coal. A series of more stringent requirements relating to particulate matter, ozone, haze, mercury, sulfur dioxide, nitrogen oxide and other air pollutants are expected to be proposed or become effective in coming years. The Clean Power Plan, under review by U.S. courts, would severely limit emissions of carbon dioxide which would adversely affect our ability to sell coal. In addition, concerted conservation efforts that result in reduced electricity consumption could cause coal prices and sales of our coal to materially decline.

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Considerable uncertainty is associated with these air emissions initiatives. The content of regulatory requirements in the United States is in the process of being developed, and many new regulatory initiatives remain subject to review by federal or state agencies or the courts. Stringent air emissions limitations are either in place or are likely to be imposed in the short to medium term, and these limitations will likely require significant emissions control expenditures for many coal-fueled power plants. As a result, these power plants may switch to other fuels that generate fewer of these emissions or may install more effective pollution control equipment that reduces the need for low sulfur coal, possibly reducing future demand for coal and a reduced need to construct new coal-fueled power plants. Any switching of fuel sources away from coal, closure of existing coal-fired plants, or reduced construction of new plants could have a material adverse effect on demand for and prices received for our coal. Alternatively, less stringent air emissions limitations, particularly related to sulfur, to the extent enacted could make low sulfur coal less attractive, which could also have a material adverse effect on the demand for and prices received for our coal.

You should see Item 1, Environmental and Other Regulatory Matters for more information about the various governmental regulations affecting us.

The demand for our products or our securities, as well as the number and quantity of viable financing alternatives, may be significantly impacted by increased regulation or other scrutiny of topics related to coal combustion.

Global climate issues and topics related to greenhouse gas emissions, such as the impact of fossil fuel combustion, continue to attract increasing public scrutiny. Legislative or regulatory efforts at the international, federal, state or local level to control emissions from the combustion of coal may result in electricity generators increasingly using fuel sources other than coal or closures of coal-fueled power plants. In addition, certain banks and other financing sources have taken actions to limit available financing for the development of new coal-fueled power plants, which also may adversely impact the future global demand for coal. Further, there have been recent efforts by members of the general financial and investment communities, such as investment advisors, sovereign wealth funds, public pension funds, universities and other groups, to divest themselves and to promote the divestment of securities issued by companies involved in the fossil fuel extraction market, such as coal producers. Those entities also have been pressuring lenders to limit financing available to such companies. These efforts may adversely affect the market for our securities and our ability to access capital and financial markets in the future.

Any future laws, regulations or other policies of the nature described above may adversely impact our business in material ways. The degree to which any particular law, regulation or policy impacts us will depend on several factors, including the substantive terms involved, the relevant time periods for enactment and any related transition periods. We routinely attempt to evaluate the potential impact on us of any proposed laws, regulations or policies, which requires that we make several material assumptions. From time to time, we determine that the impact of one or more such laws, regulations or policies, if adopted and ultimately implemented as proposed, may result in materially adverse impacts on our operations, financial condition or cash flow; however, we often are not able to reasonably quantify such impacts. In general, however, it is likely that any future laws, regulations or other policies aimed at reducing greenhouse gas emissions will negatively impact demand for our coal.

Our failure to obtain and renew permits necessary for our mining operations could negatively affect our business.

Mining companies must obtain numerous permits that impose strict regulations on various environmental and operational matters in connection with coal mining. These include permits issued by various federal, state and local agencies and regulatory bodies. The permitting rules, and the interpretations of these rules, are complex, change frequently and are often subject to discretionary interpretations by the regulators, all of which may make compliance more difficult or impractical, and may possibly preclude the continuance of ongoing operations or the development of future mining operations. The public, including non-governmental organizations, anti-mining groups and individuals, have certain statutory rights to comment upon and submit objections to requested permits and environmental impact statements prepared in connection with applicable regulatory processes, and otherwise engage in the permitting process, including bringing citizens lawsuits to challenge the issuance of permits, the validity of environmental impact statements or performance of mining activities. Accordingly, required permits may not be issued or renewed in a timely fashion or at all, or permits issued or renewed may be conditioned in a

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manner that may restrict our ability to efficiently and economically conduct our mining activities, any of which would materially reduce our production, cash flow and profitability.

Federal or state regulatory agencies have the authority to order certain of our mines to be temporarily or permanently closed under certain circumstances, which could materially and adversely affect our ability to meet our customers demands.

Federal or state regulatory agencies have the authority under certain circumstances following significant health and safety incidents, such as fatalities, to order a mine to be temporarily or permanently closed. If this occurred, we may be required to incur capital expenditures to re-open the mine. In the event that these agencies order the closing of our mines, our coal sales contracts generally permit us to issue *force majeure* notices which suspend our obligations to deliver coal under these contracts. However, our customers may challenge our issuances of *force majeure* notices. If these challenges are successful, we may have to purchase coal from third-party sources, if it is available, to fulfill these obligations, incur capital expenditures to re-open the mines and/or negotiate settlements with the customers, which may include price reductions, the reduction of commitments or the extension of time for delivery or terminate customers contracts. Any of these actions could have a material adverse effect on our business and results of operations.

Extensive environmental regulations impose significant costs on our mining operations, and future regulations could materially increase those costs or limit our ability to produce and sell coal.

The coal mining industry is subject to increasingly strict regulation by federal, state and local authorities with respect to environmental matters such as:

- limitations on land use;
- mine permitting and licensing requirements;
- reclamation and restoration of mining properties after mining is completed;
- management of materials generated by mining operations;
- the storage, treatment and disposal of wastes;
- remediation of contaminated soil and groundwater;
- air quality standards;
- water pollution;
- protection of human health, plant-life and wildlife, including endangered or threatened species;
- protection of wetlands;

- the discharge of materials into the environment;
- the effects of mining on surface water and groundwater quality and availability; and
- the management of electrical equipment containing polychlorinated biphenyls.

The costs, liabilities and requirements associated with the laws and regulations related to these and other environmental matters may be costly and time-consuming and may delay commencement or continuation of exploration or production operations. We cannot assure you that we have been or will be at all times in compliance with the applicable laws and regulations. Failure to comply with these laws and regulations may result in the assessment of administrative, civil and criminal penalties, the imposition of cleanup and site restoration costs and liens, the issuance of injunctions to limit or cease operations, the suspension or revocation of permits and other enforcement measures that could have the effect of limiting production from our operations. We may incur material costs and liabilities resulting from claims for damages to property or injury to persons arising from our operations. If we are pursued for sanctions, costs and liabilities in respect of these matters, our mining operations and, as a result, our profitability could be materially and adversely affected.

New legislation or administrative regulations or new judicial interpretations or administrative enforcement of existing laws and regulations, including proposals related to the protection of the environment that would further regulate and tax the coal industry, may also require us to change operations significantly or incur increased costs. Such changes could have a material adverse effect on our financial condition and results of operations. You should see the section entitled Environmental and Other Regulatory Matters in Item 1 for more information about the various governmental regulations affecting us.

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If the assumptions underlying our estimates of reclamation and mine closure obligations are inaccurate, our costs could be greater than anticipated.

SMCRA and counterpart state laws and regulations establish operational, reclamation and closure standards for all aspects of surface mining, as well as most aspects of underground mining. We base our estimates of reclamation and mine closure liabilities on permit requirements, engineering studies and our engineering expertise related to these requirements. Our management and engineers periodically review these estimates. The estimates can change significantly if actual costs vary from our original assumptions or if governmental regulations change significantly. We are required to record new obligations as liabilities at fair value under generally accepted accounting principles. In estimating fair value, we considered the estimated current costs of reclamation and mine closure and applied inflation rates and a third-party profit, as required. The third-party profit is an estimate of the approximate markup that would be charged by contractors for work performed on our behalf. The resulting estimated reclamation and mine closure obligations could change significantly if actual amounts change significantly from our assumptions, which could have a material adverse effect on our results of operations and financial condition.

Our operations may impact the environment or cause exposure to hazardous substances, and our properties may have environmental contamination, which could result in material liabilities to us.

Our operations currently use hazardous materials and generate limited quantities of hazardous wastes from time to time. We could become subject to claims for toxic torts, natural resource damages and other damages as well as for the investigation and cleanup of soil, surface water, groundwater, and other media. Such claims may arise, for example, out of conditions at sites that we currently own or operate, as well as at sites that we previously owned or operated, or at sites that we may acquire. Our liability for such claims may be joint and several with other owners or operators, so that we may be held responsible for more than our share of the contamination or other damages, or even for the entire share.

We maintain extensive coal refuse areas and slurry impoundments at a number of our mining complexes. Such areas and impoundments are subject to extensive regulation. Slurry impoundments can fail, which could release large volumes of coal slurry into the surrounding environment. Structural failure of an impoundment can result in extensive damage to the environment and natural resources, such as bodies of water that the coal slurry reaches, as well as liability for related personal injuries and property damages, and injuries to wildlife. Some of our impoundments overlie mined-out areas, which can pose a heightened risk of failure and of damages arising out of failure. If one of our impoundments were to fail, we could be subject to substantial claims for the resulting environmental contamination and associated liability, as well as for fines and penalties.

Drainage flowing from or caused by mining activities can be acidic with elevated levels of dissolved metals, a condition referred to as acid mine drainage, which we refer to as AMD. The treating of AMD can be costly. Although we do not currently face material costs associated with AMD, it is possible that we could incur significant costs in the future.

These and other similar unforeseen impacts that our operations may have on the environment, as well as exposures to hazardous substances or wastes associated with our operations, could result in costs and liabilities that could materially and adversely affect us.

Judicial rulings that restrict how we may dispose of mining wastes could significantly increase our operating costs, discourage customers from purchasing our coal and materially harm our financial condition and operating results.

To dispose of mining overburden generated by our Appalachian surface mining operations, we often need to obtain permits to construct and operate valley fills and surface impoundments. Some of these permits are Clean Water Act § 404 permits issued by the Army Corps of Engineers (the Corps). Two of our operating subsidiaries were identified in an existing lawsuit, which challenged the issuance of such permits and asked that the Corps be ordered to rescind them. Two of our operating subsidiaries intervened in the suit to protect their interests in being allowed to operate under the issued permits, and the claims against one of the subsidiaries was thereafter dismissed. On February 13, 2009, the U.S. Court of Appeals for the Fourth Circuit ruled on appeals from decisions rendered prior to our intervention, which may have a favorable impact on our permits. The matter is pending before the U.S. District Court for the Southern District of West Virginia on Mingo Logan s motion for summary judgment. If the matter is resolved ultimately in a manner that is adverse to the interests of our operating subsidiaries, such subsidiaries operating results may be adversely impacted. For more information regarding this litigation matter you should see the section entitled Legal Proceedings Permit Litigation Matters under Item 3.

Changes in the legal and regulatory environment could complicate or limit our business activities, increase our operating costs or result in litigation.

The conduct of our businesses is subject to various laws and regulations administered by federal, state and local governmental agencies in the United States. These laws and regulations may change, sometimes dramatically, as a result of political, economic or social events or in response to significant events. Environmental and other non-governmental organizations and activists, many of which are well funded, continue to exert pressure on regulators and other government bodies to enact more stringent laws and regulations. Changes in the legal and regulatory environment in which we operate may impact our results, increase our costs or liabilities, complicate or limit our business activities or result in litigation. Such legal and regulatory environment changes may include changes in such items as: the processes for obtaining or renewing permits; self-bonding programs; federal lease by application programs; costs associated with providing healthcare benefits to employees; health and safety standards; accounting standards; taxation requirements; and competition laws.

For example, in April 2010, the EPA issued comprehensive guidance regarding the water quality standards that EPA believes should apply to certain new and renewed Clean Water Act permit applications for Appalachian surface coal mining operations. Under the EPA s guidance, applicants seeking to obtain state and federal Clean Water Act permits for surface coal mining in Appalachia must perform an evaluation to determine if a reasonable potential exists that the proposed mining would cause a violation of water quality standards. According to the EPA Administrator, the water quality standards set forth in the EPA s guidance may be difficult for most surface mining operations to meet. Additionally, the EPA s guidance contains requirements for the avoidance and minimization of environmental and mining impacts, consideration of the full range of potential impacts on the environment, human health and local communities, including low-income or minority populations, and provision of meaningful opportunities for public participation in the permit process. The EPA s guidance is subject to several pending legal challenges related to its legal effect and sufficiency including consolidated challenges pending in the United States Court of Appeals for the District of Columbia led by the National Mining Association. We may be required to meet these requirements in the future in order to obtain and maintain permits that are important to our Appalachian operations. We cannot give any assurance that we will be able to meet these or any other new standards.

In response to the April 2010 explosion at Massey Energy Company s Upper Big Branch Mine and the ensuing tragedy, we expect that safety matters pertaining to underground coal mining operations will continue to be the topic of new legislation and regulation, as well as the subject of heightened enforcement efforts. For example, federal and West Virginia state authorities have announced special inspections of coal mines to evaluate several safety concerns, including the accumulation of coal dust and the proper ventilation of gases such as methane. In addition, both federal and West Virginia state authorities have announced that they are considering changes to mine safety rules and regulations which could potentially result in additional or enhanced required safety equipment, more frequent mine inspections, stricter and more thorough enforcement practices and enhanced reporting requirements. Any new environmental, health and safety requirements may increase the costs associated with obtaining or maintaining permits necessary to perform our mining operations or otherwise may prevent, delay or reduce our planned production, any of which could adversely affect our financial condition, results of operations and cash flows.

Further, mining companies are entitled a tax deduction for percentage depletion, which may allow for depletion deductions in excess of the basis in the mineral reserves. The deduction is currently being reviewed by the federal government for repeal. If repealed, the inability to take a tax deduction for percentage depletion could have a material impact on our financial condition, results of operations, cash flows and future tax payments.

ITEM 1B. UNRESOLVED STAFF COMMENTS.

None.

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ITEM 2. PROPERTIES.

Our Properties

General

At December 31, 2015, we owned or controlled, primarily through long-term leases, approximately 28,541 acres of coal land in Ohio, 21,832 acres of coal land in Maryland, 46,556 acres of coal land in Virginia, 380,471 acres of coal land in West Virginia, 106,059 acres of coal land in Wyoming, 273,299 acres of coal land in Illinois, 129,043 acres of coal land in Kentucky, 10,000 acres of coal land in Montana, 21,802 acres of coal land in New Mexico, 426 acres of coal land in Pennsylvania, and 18,443 acres of coal land in Colorado. In addition, we also owned or controlled through long-term leases smaller parcels of property in Alabama, Indiana, Washington, Arkansas, California, Utah and Texas. We lease approximately 86,321 acres of our coal land from the federal government and approximately 23,349 acres of our coal land from various state governments. Certain of our preparation plants or loadout facilities are located on properties held under leases which expire at varying dates over the next 30 years. Most of the leases contain options to renew. Our remaining preparation plants and loadout facilities are located on property owned by us or for which we have a special use permit.

Our executive headquarters occupies leased office space at One CityPlace Drive, in St. Louis, Missouri. Our subsidiaries currently own or lease the equipment utilized in their mining operations. You should see Our Mining Operations for more information about our mining operations, mining complexes and transportation facilities.

Our Coal Reserves

We estimate that we owned or controlled approximately 2.5 billion tons of proven and probable recoverable reserves at December 31, 2015. Our coal reserve estimates at December 31, 2015 were prepared by our engineers and geologists and reviewed by Weir International, Inc., a mining and geological consultant. Our coal reserve estimates are based on data obtained from our drilling activities and other available geologic data. Our coal reserve estimates are periodically updated to reflect past coal production and other geologic and mining data. Acquisitions or sales of coal properties will also change these estimates. Changes in mining methods or the utilization of new technologies may increase or decrease the recovery basis for a coal seam.

Our coal reserve estimates include reserves that can be economically and legally extracted or produced at the time of their determination. In determining whether our reserves meet this standard, we take into account, among other things, our potential inability to obtain a mining permit, the possible necessity of revising a mining plan, changes in estimated future costs, changes in future cash flows caused by changes in costs required to be incurred to meet regulatory requirements and obtaining mining permits, variations in quantity and quality of coal, and varying levels of demand and their effects on selling prices. We use various assumptions in preparing our estimates of our coal reserves. You should see Inaccuracies in our estimates of our coal reserves could result in decreased profitability from lower than expected revenues or higher than expected costs contained in Item 1A, Risk Factors.

The following tables present our estimated assigned and unassigned recoverable coal reserves at December 31, 2015:

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Total Assigned Reserves

(Tons in millions)

	Total Assigned Recoverable Reserves	Proven	Probable	Sulfur Content (lbs. per million Btus) <1.2	1.2-2.5	>2.5	As Received Btus per lb. (1)	Reserve Control Leased	Owned	Mining Method Surface	Under-ground	Past Reserve Estimates 2013	2014
Wyoming	1,318	1,304	14	1,257	61		8,852	1,318		1,318		1,526	1,423
Montana													
Colorado	53	50	3	53			11,533	53			53	84	65
Central App.	35	34	1	23	12		12,479	35		25	10	169	139
Northern App.	40	35	5		40		13,074	2	38		40	58	74
Illinois	37	22	15			37	10,728	30	7		37	21	33
Total	1,483	1,445	38	1,333	113	37	9,195	1,438	45	1,343	140	1,858	1,734

(1) As received Btus per lb. includes the weight of moisture in the coal on an as sold basis.

Total Unassigned Reserves

(Tons in millions)

	Total Unassigned Recoverable Reserves	Proven	Probable	Sulfur Content (lbs. per million Btus) <1.2	1.2-2.5	>2.5	As Received Btus per lb.(1)	Reserve Control Leased	Owned	Mining Method Surface	Under-ground
Wyoming	480	397	83	428	52		9,653	370	110	305	175
Montana											
Colorado	33	25	8	33			11,220	33			33
Central App.	59	50	9	20	26	13	12,522	11	48	41	18
Northern App.	144	70	74		142	2	12,961	1	143		144
Illinois	298	197	101			298	11,137	65	233	4	294
Total	1,014	739	275	481	220	313	10,777	480	534	350	664

(1) As received Btus per lb. includes the weight of moisture in the coal on an as sold basis.

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The following table reconciles 2015 and 2014 coal proven and probable reserves:

	Tons (in millions)
December 31, 2014	5,064
Depletion (1)	(127)
Revisions and additions, net (2)	(1,709)
Mining rights relinquished	(731)
December 31, 2015	2,497

(1) Reserves mined and sold in 2015.

(2) Revisions and additions, net are due to reclassification of reserves that no longer meet the definition of compliant reserves per SEC Industry Guide 7 which defines a reserve as that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination. The tonnage reclassified from reserves continues to be controlled by the company, is mineable with existing technologies, and could factor into the Company s mining plans in the future.

Federal and state legislation controlling air pollution affects the demand for certain types of coal by limiting the amount of sulfur dioxide which may be emitted as a result of fuel combustion and encourages a greater demand for low-sulfur coal. All of our identified coal reserves have been subject to preliminary coal seam analysis to test sulfur content. Of these reserves, approximately 73% consist of compliance coal, or coal which emits 1.2 pounds or less of sulfur dioxide per million Btus upon combustion, while an additional approximately 5% could be sold as low-sulfur coal. The balance is classified as high-sulfur coal. Most of our reserves are suitable for the domestic steam coal markets. A substantial portion of the low-sulfur and compliance coal reserves at a number of our Appalachian mining complexes may also be used as metallurgical coal.

The carrying cost of our coal reserves at December 31, 2015 was $2.5 billion, consisting of $33.7 million of prepaid royalties and a net book value of coal lands and mineral rights of $2.4 billion.

Reserve Acquisition Process

We acquire a significant portion of the coal we control in the western United States through the lease-by-application (LBA) process. Under this process, before a mining company can obtain new coal reserves, the coal tract must be nominated for lease, and the company must win the lease through a competitive bidding process. The LBA process can last anywhere from five to ten years from the time the coal tract is nominated to the time a final bid is accepted by the BLM. After the LBA is awarded, the company then conducts the necessary testing to determine what amount can be classified as reserves.

To initiate the LBA process, companies wanting to acquire additional coal must file an application with the BLM s state office indicating interest in a specific coal tract. The BLM reviews the initial application to determine whether the application conforms to existing land-use plans for that particular tract of land and that the application would provide for maximum coal recovery. The application is further reviewed by a regional coal team at a public meeting. Based on a review of the available information and public comment, the regional coal team will make a recommendation to the BLM whether to continue, modify or reject the application.

If the BLM determines to continue the application, the company that submitted the application will pay for a BLM-directed environmental analysis or an environmental impact statement to be completed. This analysis or impact statement

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is subject to publication and public comment. The BLM may consult with other governmental agencies during this process, including state and federal agencies, surface management agencies, Native American tribes or bands, the U.S. Department of Justice or others as needed. The public comment period for an analysis or impact statement typically occurs over a 60-day period.

After the environmental analysis or environmental impact statement has been issued and a recommendation has been published that supports the lease sale of the LBA tract, the BLM schedules a public competitive lease sale. The BLM prepares an internal estimate of the fair market value of the coal that is based on its economic analysis and comparable sales analysis. Prior to the lease sale, companies interested in acquiring the lease must send sealed bids to the BLM. The bid amounts for the lease are payable in five annual installments, with the first 20% installment due when the mining operator submits its initial bid for an LBA. Before the lease is approved by the BLM, the company must first furnish to the BLM an initial rental payment for the first year of rent along with either a bond for the next 20% annual installment payment for the bid amount, or an application for history of timely payment, in which case the BLM may waive the bond requirement if the company successfully meets all the qualifications of a timely payor. The bids are opened at the lease sale. If the BLM decides to grant a lease, the lease is awarded to the company that submitted the highest total bid meeting or exceeding the BLM s fair market value estimate, which is not published. The BLM, however, is not required to grant a lease even if it determines that a bid meeting or exceeding the fair market value of the coal has been submitted. The winning bidder must also submit a report setting forth the nature and extent of its coal holdings to the U.S. Department of Justice for a 30-day antitrust review of the lease. If the successful bidder was not the initial applicant, the BLM will refund the initial applicant certain fees it paid in connection with the application process, for example the fees associated with the environmental analysis or environmental impact statement, and the winning bidder will bear those costs. Coal won through the LBA process and subject to federal leases are administered by the U.S. Department of Interior under the Federal Coal Leasing Amendment Act of 1976. In addition, we occasionally add small coal tracts adjacent to our existing LBAs through an agreed upon lease modification with the BLM. Once the BLM has issued a lease, the company must also complete the permitting process before it can mine the coal. You should see the section entitled Environmental and Other Regulatory Matters under Item 1.

Most of our federal coal leases have an initial term of 20 years and are renewable for subsequent 10-year periods and for so long thereafter as coal is produced in commercial quantities. These leases require diligent development within the first ten years of the lease award with a required coal extraction of 1.0% of the total coal under the lease by the end of that 10-year period. At the end of the 10-year development period, the lessee is required to maintain continuous operations, as defined in the applicable leasing regulations. In certain cases a lessee may combine contiguous leases into a logical mining unit, which we refer to as an LMU. This allows the production of coal from any of the leases within the LMU to be used to meet the continuous operation requirements for the entire LMU. Some of our mines are also subject to coal leases with applicable state regulatory agencies and have different terms and conditions that we must adhere to in a similar way to our federal leases. Under these federal and state leases, if the leased coal is not diligently developed during the initial 10-year development period or if certain other terms of the leases are not complied with, including the requirement to produce a minimum quantity of coal or pay a minimum production royalty, if applicable, the BLM or the applicable state regulatory agency can terminate the lease prior to the expiration of its term.

On January 15, 2016, the federal government ordered a moratorium on new leases for coal mined from federal lands as part of a review of the government s management of federally-owned coal. The review could take the form of a programmatic environmental impact statement, which allows a broader look at all aspects of federal coal leasing across regions and can incorporate environmental and health impacts as well as financial ones. The last review on this scale occurred in the 1980 s. Please see Our inability to acquire additional coal reserves or our inability to develop coal reserves in an economically feasible manner may adversely affect our business, under Risks Related to Our Operations.

Title to Coal Property

Title to coal properties held by lessors or grantors to us and our subsidiaries and the boundaries of properties are normally verified at the time of leasing or acquisition. However, in cases involving less significant properties and consistent with industry practices, title and boundaries are not completely verified until such time as our independent operating

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subsidiaries prepare to mine such reserves. If defects in title or boundaries of undeveloped reserves are discovered in the future, control of and the right to mine such reserves could be adversely affected. You should see A defect in title or the loss of a leasehold interest in certain property could limit our ability to mine our coal reserves or result in significant unanticipated costs contained in Item 1A, Risk Factors for more information.

At December 31, 2015, approximately 23% of our coal reserves were held in fee, with the balance controlled by leases, most of which do not expire until the exhaustion of mineable and merchantable coal. Under current mining plans, substantially all reported leased reserves will be mined out within the period of existing leases or within the time period of assured lease renewals. Royalties are paid to lessors either as a fixed price per ton or as a percentage of the gross sales price of the mined coal. The majority of the significant leases are on a percentage royalty basis. In some cases, a payment is required, payable either at the time of execution of the lease or in annual installments. In most cases, the prepaid royalty amount is applied to reduce future production royalties.

From time to time, lessors or sublessors of land leased by our subsidiaries have sought to terminate such leases on the basis that such subsidiaries have failed to comply with the financial terms of the leases or that the mining and related operations conducted by such subsidiaries are not authorized by the leases. Some of these allegations relate to leases upon which we conduct operations material to our consolidated financial position, results of operations and liquidity, but we do not believe any pending claims by such lessors or sublessors have merit or will result in the termination of any material lease or sublease.

We leased approximately 65,886 acres of property to other coal operators in 2015. We received royalty income of $6.3 million in 2015 from the mining of approximately 2.1 million tons, $9.6 million in 2014 from the mining of approximately 2.6 million tons and $9.5 million in 2013 from the mining of approximately 2.8 million tons on those properties. We have included reserves at properties leased by us to other coal operators in the reserve figures set forth in this report.

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ITEM 3. LEGAL PROCEEDINGS.

In addition to the following matters, we are involved in various claims and legal actions arising in the ordinary course of business, including employee injury claims. After conferring with counsel, it is the opinion of management that the ultimate resolution of these claims, to the extent not previously provided for, will not have a material adverse effect on our consolidated financial condition, results of operations or liquidity.

Permit Litigation Matters

Surface mines at our Mingo Logan and Coal-Mac mining operations were identified in an existing lawsuit brought by the Ohio Valley Environmental Coalition (OVEC) in the U.S. District Court for the Southern District of West Virginia as having been granted Clean Water Act § 404 permits by the Army Corps of Engineers (Corps), allegedly in violation of the Clean Water Act and the National Environmental Policy Act. The lawsuit, brought by OVEC in September 2005, originally was filed against the Corps for permits it had issued to four subsidiaries of a company unrelated to us or our operating subsidiaries. The suit claimed that the Corps had issued permits to the subsidiaries of the unrelated company that did not comply with the National Environmental Policy Act and violated the Clean Water Act.

The court ruled on the claims associated with those four permits in orders of March 23 and June 13, 2007. In the first of those orders, the court rescinded the four permits, finding that the Corps had inadequately assessed the likely impact of valley fills on headwater streams and had relied on inadequate or unproven mitigation to offset those impacts. In the second order, the court entered a declaratory judgment that discharges of sediment from the valley fills into sediment control ponds constructed in-stream to control that sediment must themselves be permitted under a different provision of the Clean Water Act, § 402, and meet the effluent limits imposed on discharges from these ponds. Both of the district court rulings were appealed to the U.S. Court of Appeals for the Fourth Circuit.

Before the court entered its first order, the plaintiffs were permitted to amend their complaint to challenge the Coal-Mac and Mingo Logan permits. Plaintiffs sought preliminary injunctions against both operations, but later reached agreements with our operating subsidiaries that have allowed mining to progress in limited areas while the district court s rulings were on appeal. The claims against Coal-Mac were thereafter dismissed.

In February 2009, the Fourth Circuit reversed the district court. The Fourth Circuit held that the Corps jurisdiction under Section 404 of the Clean Water Act is limited to the narrow issue of the filling of jurisdictional waters. The court also held that the Corps findings of no significant impact under the National Environmental Policy Act and no significant degradation under the Clean Water Act are entitled to deference. Such findings entitle the Corps to avoid preparing an environmental impact statement, the absence of which was one issue on appeal. These holdings also validated the type of mitigation projects proposed by our operations to minimize impacts and comply with the relevant statutes. Finally, the Fourth Circuit found that stream segments, together with the sediment ponds to which they connect, are unitary waste treatment systems, not waters of the United States, and that the Corps had not exceeded its authority in permitting them.

OVEC sought rehearing before the entire appellate court, which was denied in May 2009, and the decision was given legal effect in June 2009. An appeal to the U.S. Supreme Court was then filed in August 2009. On August 3, 2010 OVEC withdrew its appeal.

Mingo Logan filed a motion for summary judgment with the district court in July 2009, asking that judgment be entered in its favor because no outstanding legal issues remained for decision as a result of the Fourth Circuit s February 2009 decision. By a series of motions, the United States obtained extensions and stays of the obligation to respond to the motion in the wake of its letters to the Corps dated September 3 and October 16, 2009 (discussed below). By order dated April 22, 2010, the district court stayed the case as to Mingo Logan for the shorter of either six months or the completion of the U.S. Environmental Protection Agency s (EPA) proposed action to deny Mingo Logan the right to use its Corps permit (as discussed below).

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On October 15, 2010, the United States moved to extend the existing stay for an additional 120 days (until February 22, 2011) while the EPA Administrator reviewed the Recommended Determination issued by the EPA Region 3. By Memorandum Opinion and Order dated November 2, 2010, the court granted the United States motion. On January 13, 2011, the EPA issued its Final Determination to withdraw the specification of two of the three watersheds as a disposal site for dredged or fill material approved under the current Section 404 permit. The court was notified of the Final Determination and by order dated March 21, 2011 stayed further proceedings in the case until further order of the court, in light of the challenge to the EPA s Final Determination then pending in federal court in Washington, D.C. In a Memorandum and Opinion and separate Order, each dated March 23, 2012, the federal court granted Mingo Logan s motion for summary judgment, vacated EPA s Final Determination and found valid and in full force Mingo Logan s Section 404 permit. As described more fully below, the EPA appealed that order to the United States Court of Appeals for the D.C. Circuit and by Opinion of the Court dated April 23, 2013, the court reversed the lower court s order and remanded the matter to the district court for further proceedings.

On April 5, 2012, Mingo Logan moved to lift the stay referenced above. On June 5, 2012, the court entered an order lifting the stay and allowing the case to proceed on Mingo Logan s Motion for Summary Judgment. Shortly thereafter, OVEC filed a motion for leave to file a seventh amended and supplemental complaint seeking to update existing counts and raising two new claims (one, to enforce EPA s Final Determination and, the other, that the Corps refusal to prepare a Supplemental Environmental Impact Statement violates the APA and NEPA). By Memorandum, Opinion and Order dated July 25, 2012, the court granted OVEC s motion and directed the Clerk to file OVEC s Seventh Amended and Supplemental Complaint. Mingo Logan filed its Motion for Summary Judgment on August 31, 2012, along with its Answer to the Seventh Amended and Supplemental Complaint and the matter remains pending before the court.

As a result of the Bankruptcy Petitions, much of the pending litigation against the Debtors is stayed. Subject to certain exceptions and approval by the Court, during the Chapter 11 process, no party can take further actions to recover pre-petition claims against the Debtors.

EPA Actions Related to Water Discharges from the Spruce Permit

By letter of September 3, 2009, the EPA asked the Corps of Engineers to suspend, revoke or modify the existing permit it issued in January 2007 to Mingo Logan under Section 404 of the Clean Water Act, claiming that new information and circumstances have arisen which justify reconsideration of the permit. By letter of September 30, 2009, the Corps of Engineers advised the EPA that it would not reconsider its decision to issue the permit. By letter of October 16, 2009, the EPA advised the Corps that it has reason to believe that the Mingo Logan mine will have unacceptable adverse impacts to fish and wildlife resources and that it intends to issue a public notice of a proposed determination to restrict or prohibit discharges of fill material that already are approved by the Corps permit. By federal register publication dated April 2, 2010, the EPA issued its Proposed Determination to Prohibit, Restrict or Deny the Specification, or the Use for Specification of an Area as a Disposal Site: Spruce No. 1 Surface Mine, Logan County, WV pursuant to Section 404(c) of the Clean Water Act, the EPA accepted written comments on its proposed action (sometimes known as a veto proceeding), through June 4, 2010 and conducted a public hearing, as well, on May 18, 2010. We submitted comments on the action during this period. On September 24, 2010, the EPA Region 3 issued a Recommended Determination to the EPA Administrator recommending that the EPA prohibit the placement of fill material in two of the three watersheds for which filling is approved under the current Section 404 permit. Mingo Logan, along with the Corps, West Virginia DEP and the mineral owner, engaged in a consultation with the EPA as required by the regulations, to discuss corrective action to address the unacceptable adverse effects identified. On January 13, 2011, the EPA issued its Final Determination pursuant to Section 404(c) of the Clean Water Act to withdraw the specification of two of the three watersheds approved in the current Section 404 permit as a disposal site for dredged or fill material. By separate action, Mingo Logan sued the EPA on April 2, 2010 in federal court in Washington, D.C. seeking a ruling that the EPA has no authority under the Clean Water Act to veto a previously issued permit (Mingo Logan Coal Company, Inc. v. USEPA, No. 1:10-cv-00541(D.D.C.)). The EPA moved to dismiss that action, and we responded to that motion.

Pursuant to a scheduling order for summary disposition of the case, motions and cross-motions for summary judgment by both parties were filed. On November 30, 2011, the court heard arguments from the parties limited only to the threshold

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issue of whether the EPA had the authority under Section 404(c) of the Clean Water Act to withdraw the specification of the disposal site after the Corps had already issued a permit under Section 404(a). The court deferred consideration of the remaining issue (i.e. whether the EPA s Final Determination is otherwise lawful) until after consideration of the threshold issue. On March 23, 2012, the court entered an Order and a Memorandum Opinion granting Mingo Logan s motion for summary judgment, denying the EPA s cross-motion for summary judgment, vacating the Final Determination and ordering that Mingo Logan s Section 404 permit remains valid and in full force.

On May 11, 2012, the EPA filed a notice of appeal to the United States Court of Appeals for the District of Columbia Circuit. The court heard oral arguments on March 14, 2013. By opinion of the court filed on April 23, 2013, the court reversed the district court on the threshold issue and remanded the matter to the district court to address the merits of our APA challenge to the Final Determination. On June 6, 2013, Mingo Logan filed a Petition for Rehearing En Banc and by Order filed July 25, 2013, the court denied the petition.

On November 13, 2013, Mingo Logan filed a Petition for Writ of Certiorari with the Supreme Court of the United States seeking review of the D.C. Circuit s decision. On March 24, 2014, the Supreme Court denied Mingo Logan s Petition for Writ of Certiorari and remanded the matter to the federal district court for the District of Columbia for further consideration on the merits of the Final Determination. On September 30, 2014, the court entered an opinion and order denying Mingo Logan s motion for summary judgment and granting the government s motion for summary judgment. The court upheld the Final Determination finding that EPA s decision to withdraw the specifications for filling in Oldhouse Branch and Pigeonroost Branch under Mingo Logan s Section 404 permit was not arbitrary and capricious. On November 11, 2014, Mingo Logan filed a notice of appeal to the United States Court of Appeals for the District of Columbia Circuit. The matter is fully briefed and oral argument is scheduled for April 11, 2016.

UMWA 1974 Pension Plan et al. v Peabody Energy and Arch

On July 16, 2015, the UMWA 1974 Pension Trust (Plan) and its Trustees filed a Complaint for Declaratory Judgment against Peabody Energy Corporation, Peabody Holding Company, LLC and Arch, in the U.S. District Court in Washington D.C., seeking an order from the court requiring the defendants to submit to arbitration to determine their responsibility for pension withdrawal liability (triggered by Patriot Coal Corporation s (Patriot) recent bankruptcy filing) for Plan participants of Patriot who formerly worked for Peabody and Arch subsidiaries. In the alternative, the complaint asks the court to declare that Peabody and Arch are liable for Patriot s withdrawal liability. With respect to Arch, plaintiffs allege that Arch engaged in actions to avoid and evade pension fund withdrawal liability when it sold subsidiaries that were signatory to UMWA agreements, to Magnum Coal Company (Magnum) in 2005, allegedly in violation of ERISA law. Patriot subsequently purchased Magnum in 2008. On October 29, 2015, plaintiffs filed an amended complaint to reflect that Patriot formally rejected its obligations to contribute to the Plan, triggering a withdrawal. The amended complaint further alleged that Arch owes $299.8 million in withdrawal liability. On October 29, 2015, the UMWA Funds issued a letter to Arch demanding payment of this withdrawal liability amount. We believe there is no basis in the law to support any claim that Arch is responsible for Patriot s withdrawal liability and we plan to vigorously defend this complaint. Arch notified the District Court and the parties to the litigation of its bankruptcy filing and the automatic stay and, on January 21, 2016, the plaintiffs agreed that the automatic stay in the Chapter 11 Case applies to Arch and its affiliates that have filed bankruptcy petitions.

ITEM 4. MINE SAFETY DISCLOSURES.

The statement concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this Annual Report on Form 10-K for the period ended December 31, 2015.

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PART II

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

Market for Registrant s Common Equity and Related Stockholder Matters

On January 11, 2016, the New York Stock Exchange (NYSE) determined that Arch was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards, and trading of the Company s common stock was suspended. Our stock is now traded under the ticker symbol ACIIQ on the OTC Pink marketplace, operated by OTC Markets Group Inc. Prior to January 11, 2016, our common stock was traded on the NYSE under the symbol ACI. On February 12, 2016, our common stock closed at $0.47 on the OTC Pink. On that date, there were approximately 5,400 holders of record of our common stock.

On August 4, 2015, the Company effected a 1-for-10 reverse stock split of its common stock. Each stockholder s percentage ownership and proportional voting power remain unchanged as a result of the reverse stock split. All applicable share data, per share amounts and related information enclosed have been adjusted retroactively to give effect to the 1-for-10 reverse stock split.

In 2014, we paid an annual dividend on our common stock totaling $2.1 million, or $0.10 per share. In 2015 we did not pay an annual dividend. We are prohibited from paying dividends on our common stock during Chapter 11.

We expect that the existing common stock of the Company will be extinguished upon the Company s emergence from Chapter 11, and existing equity holders will likely not receive consideration in respect of their equity interests.

The following table sets forth for each period indicated the dividends paid per common share, the high and low sale prices of our common stock for each of the quarterly periods indicated.

	2015			
	March 31	June 30	September 30	December 31
Dividends per common share	$	$	$	$
High	16.80	11.10	9.31	4.66
Low	8.20	3.40	1.05	0.84

	2014			
	March 31	June 30	September 30	December 31
Dividends per common share	$ 0.10	$	$	$
High	48.20	51.80	36.70	28.60

Low	38.81	32.30	20.80	15.00

Issuer Purchases of Equity Securities

In September 2006, our board of directors authorized a share repurchase program for the purchase of up to 1,400,000 shares of our common stock. We did not purchase any shares of our common stock under this program during the fiscal year ended December 31, 2015. As of December 31, 2015, we have purchased 307,420 shares of our common stock under this program since the board of directors authorized the program. We are prohibited from purchasing shares under this program during Chapter 11.

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ITEM 6. SELECTED FINANCIAL DATA.

	Year Ended December 31				
(In thousands, except per share data)	**2015 (1)**	**2014**	**2013 (3)**	**2012 (4)**	**2011 (5)**
Statement of Operations Data:					
Revenues	$ 2,573,260	$ 2,937,119	$ 3,014,357	$ 3,768,126	$ 3,883,039
Mine closure and asset impairment costs	2,628,303	24,113	220,879	539,182	7,316
Goodwill impairment			265,423	330,680	
Acquisition and transition costs					47,360
Income (loss) from operations	(2,865,063)	(149,531)	(663,141)	(757,012)	343,061
Interest expense	(397,979)	(390,946)	(381,267)	(317,615)	(230,186)
Non-operating expenses	(27,910)		(42,921)	(23,668)	(51,448)
Income (loss) from continuing operations	(2,913,142)	(558,353)	(745,228)	(738,915)	89,015
Diluted earnings (loss) from continuing operations per common share	$ (136.86)	$ (26.31)	$ (35.15)	$ (34.97)	$ 4.60
Net income (loss) attributable to Arch Coal	(2,913,142)	(558,353)	(641,832)	(683,955)	141,683
Basic earnings (loss) per common share	$ (136.86)	$ (26.31)	$ (30.26)	$ (32.36)	$ 7.45
Diluted earnings (loss) per common share	$ (136.86)	$ (26.31)	$ (30.26)	$ (32.36)	$ 7.42
Balance Sheet Data:					
Total assets	$ 5,106,738	$ 8,429,723	$ 8,990,193	$ 10,006,777	$ 10,213,959
Working capital	(4,361,009)	1,023,357	1,293,849	1,337,035	162,106
Current maturities of debt (2)	5,107,210	36,885	33,493	32,896	280,851
Long-term debt, less current maturities	30,953	5,123,485	5,118,002	5,085,879	3,762,297
Other long-term obligations	755,283	695,881	717,174	825,080	864,667
Noncurrent deferred income tax liability		422,809	413,546	664,182	976,753
Arch Coal stockholders equity	(1,244,289)	1,668,154	2,253,249	2,854,567	3,578,040
Common Stock Data:					
Dividends per share	$	$ 0.10	$ 1.20	$ 2.00	$ 4.30
Shares outstanding at year-end	21,446	21,227	21,228	21,225	21,167
Cash Flow Data:					
Cash provided by operating activities	(44,367)	(33,582)	55,742	332,804	642,242
Depreciation, depletion and amortization, including amortization of acquired sales contracts, net	370,534	405,561	438,247	500,319	444,518
Capital expenditures	119,024	147,286	296,984	395,225	540,936
Acquisitions of businesses, net of cash acquired					2,894,339
Net proceeds from the issuance of long term debt		(4,519)	623,511	1,942,685	1,906,306
Net proceeds from the sale of common stock					1,267,933
Payments to retire debt, including redemption premium			628,660	452,934	605,178
Net increase (decrease) in borrowings under lines of credit and commercial paper program				(481,300)	424,396
Dividend payments		2,123	25,475	42,440	80,748
Operating Data:					
Tons sold	127,632	134,360	139,607	140,820	156,897
Tons produced	126,820	132,614	136,613	135,934	151,829
Tons purchased from third parties	1,287	1,182	2,925	4,327	5,557

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(1) Our results in 2015 were impacted by further weakening of both the thermal and metallurgical coal markets. We incurred $2.6 billion of mine closure and asset impairment charges during the year; for additional information see Note 5 to the Consolidated Financial Statements, Impairment Charges and Mine Closure Costs.

(2) The filing of the Bankruptcy Petitions constituted an event of default that accelerated our obligations under the documents governing each of our 7.00% senior notes due 2019, 9.875% senior notes due 2019, 8.00% senior secured second lien notes due 2019, 7.25% senior notes due 2020, 7.25% senior notes due 2021 and senior secured first lien term loan due 2018.

(3) As part of a strategy to divest non-core thermal coal assets, on August 16, 2013, we sold Canyon Fuel Company, LLC (Canyon Fuel) to Bowie Resources, LLC for $423 million. Canyon Fuel operated the Sufco and Skyline longwall mining complexes and the Dugout Canyon continuous miner operation in Utah. We recognized a gain on the sale of Canyon Fuel, net of tax, of $77.0 million during the third quarter of 2013. See Note 3 to the Consolidated Financial Statements, Divestitures, for further information.

(4) Our results in 2012 were impacted by challenging market conditions. In response to these conditions, we idled 10 mines in Appalachia and curtailed production at other thermal mines. We incurred $523.6 million of closure and impairment costs relating to the closures, and recognized goodwill impairment charges $330.7 million. In addition, we refinanced our debt, increasing our average borrowing level to build cash and highly liquid investments on the balance sheet as well as to decrease near-term maturities of debt.

(5) On June 15, 2011, we completed our acquisition of ICG, a leading coal producer, adding 12 mining complexes in Appalachia, one complex in the Illinois Basin and one mine under development in Appalachia, along with other coal reserves not currently in development. To finance the acquisition, we sold 48.7 million shares of our common stock and issued $2.0 billion in aggregate principal amount of senior unsecured notes. We directly expensed costs related to the financing and acquisition of $104.2 million.

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

Overview

Our results in 2015 were impacted by further weakening of both the thermal and metallurgical coal markets. The domestic thermal market was depressed by low natural gas prices and the implementation of new environmental regulations. Abundant supply depressed natural gas pricing to levels that made it increasingly economical to dispatch for electric generation relative to thermal coal. Implementation of the MATS regulation resulted in the closure of some older coal-based generating facilities, further depressing domestic thermal coal demand. Pricing in international thermal coal markets was uneconomic for our operations throughout 2015.

Metallurgical coal markets continued to weaken due to oversupply. International metallurgical markets have been impacted by the economic slowdown in China and elsewhere. Furthermore, producers in the U.S. have been pressured by the strengthening of the United States dollar compared to other producing countries currencies. Many foreign producers benefited significantly from this strengthening as much of their cost structure is tied to their local currencies, but their revenue is largely generated in United States dollars. Additionally, domestic demand for metallurgical coal softened in 2015 as blast furnace utilization has dropped, largely due to declining demand for steel in the oil and gas industry.

Despite lower volumes, we reduced cash costs per ton in our Powder River Basin and Appalachian regions compared to 2014. In Appalachia we shifted production to lower cost operations, particularly the Leer Mine, and in the Powder River Basin we benefited from lower diesel fuel pricing. Both regions benefited from a strong focus on cost control. We continue cost control efforts throughout the business, and further reduced our capital outlays from 2014 levels.

On January 11, 2016 (the Petition Date), Arch and substantially all of its wholly owned domestic subsidiaries (the Filing Subsidiaries and, together with Arch, the Debtors) filed voluntary petitions for reorganization (collectively, the

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Bankruptcy Petitions) under Chapter 11 of Title 11 of the U.S. Code (the Bankruptcy Code) in the United States Bankruptcy Court for the Eastern District of Missouri (the Court). The Debtor s Chapter 11 Cases (collectively, the Chapter 11 Cases) are being jointly administered under the caption *In re Arch Coal, Inc., et al.* Case No. 16-40120 (lead case). Each Debtor will continue to operate its business as a debtor in possession under the jurisdiction of the Court and in accordance with the applicable provisions of the Bankruptcy Code and the orders of the Court.

The filing of the Bankruptcy Petitions constituted an event of default that accelerated Arch s obligations under the Debt Instruments, all as further described in Note 26, Subsequent Events , to the Consolidated Financial Statements included in the Form 10-K. Pursuant to the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including most actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property.

Additionally, on the Petition Date, the New York Stock Exchange (the NYSE) determined that our common stock was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards and trading in our common stock was suspended on January 11, 2016. We expect that the existing common stock of the Company will be extinguished upon the Company s emergence from Chapter 11 and existing equity holders will not receive consideration in respect of their equity interests.

We expect that our financial results will be significantly impacted by the filing of the Bankruptcy Petitions. For example, the Debtors pre-petition unsecured obligations are subject to compromise and may be settled under a plan of reorganization for lesser amounts than the original claims. These liabilities remain subject to future adjustments arising from negotiated settlements, actions of the Court, rejection of executory contracts and unexpired leases, the determination as to the value of collateral securing the claims, proofs of claim, or other events. Additionally, under Section 502(b)(2) of the Bankruptcy Code, we are no longer required to pay interest on our senior unsecured notes and our senior secured notes accruing on or after the Petition Date. Subject to certain exceptions under the Bankruptcy Code, the filing of the Debtors Chapter 11 Cases pursuant to Section 362(a) of the Bankruptcy Code also automatically stayed the continuation of most legal proceedings, including the third party litigation matters described under Item 3, Legal Proceedings Permit Litigation Matters, or the filing of other actions against or on behalf of the Debtors or their property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of the Debtors bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim. The determination of how liabilities will ultimately be treated cannot be made until the Court approves a plan of reorganization. Accordingly, the ultimate amount or treatment of such liabilities is not determinable at this time.

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Operational Performance

The following table shows operating results of continuing coal operations for the years ended December 31, 2015, 2014 and 2013. The other category includes the results of our other bituminous thermal operations, our West Elk mining complex in Colorado and our Viper mining complex in Illinois.

	Year Ended December 31, 2015		2014		2013	
Powder River Basin						
Tons sold (in thousands)		108,481		111,156		111,653
Coal sales per ton sold	$	13.15	$	12.86	$	12.44
Cost per ton sold	$	12.36	$	12.58	$	12.18
Operating margin per ton sold	$	0.79	$	0.28	$	0.26
Adjusted EBITDA (in thousands)	$	258,300	$	197,920	$	206,910
Appalachia						
Tons sold (in thousands)		11,926		14,484		14,224
Coal sales per ton sold	$	62.47	$	68.77	$	73.07
Cost per ton sold	$	69.19	$	77.59	$	81.27
Operating loss per ton sold	$	(6.72)	$	(8.82)	$	(8.20)
Adjusted EBITDA (in thousands)	$	82,837	$	109,053	$	88,883
Other						
Tons sold (in thousands)		7,225		8,720		8,422
Coal sales per ton sold	$	30.99	$	30.78	$	32.63
Cost per ton sold	$	27.83	$	25.44	$	26.95
Operating margin per ton sold	$	3.16	$	5.34	$	5.68
Adjusted EBITDA (in thousands)	$	17,044	$	58,325	$	91,642

This table reflects numbers reported under a basis that differs from U.S. GAAP. See the Reconciliation of Non-GAAP measures below for explanation and reconciliation of these amounts to the nearest GAAP figures. Other companies may calculate these per ton amounts differently, and our calculation may not be comparable to other similarly titled measures.

Powder River Basin Adjusted EBITDA increased 31% in 2015 when compared to 2014 due to increased coal sales per ton sold and decreased cost per ton sold, partially offset by lower shipment volume. Pricing improved as a significant portion of 2015 shipments were priced following the harsh 2013-2014 winter season when the market was stronger. Cost benefited from lower diesel fuel pricing and ongoing cost control efforts. Shipment volume was favorable year over year through the first three quarters of 2015, but fell off significantly in the fourth quarter of 2015, reducing full year shipment volume below 2014 levels. Natural gas pricing fell to historically low levels as the 2015 winter season began mildly, and the competing fuel began to dispatch for electrical generation ahead of Power River Basin coal in some areas. This decrease in coal burn has led to increasing generator stockpiles, further depressing demand.

Adjusted EBITDA decreased in 2014 when compared to 2013 due to a slight decrease in shipment volume and higher cost per ton sold, partially offset by increased coal sales per ton sold. Pricing improved as low-priced export volume decreased and domestic markets firmed in 2014. Maintenance costs increased in anticipation of increased shipment volume; however, railroad performance issues negatively impacted Powder River Basin shipment volumes for much of 2014.

Appalachia Adjusted EBITDA decreased 24% in 2015 when compared to 2014 due primarily to the gain on sale of operating and idled thermal coal mines in Kentucky in 2014 ($20.6 million). See Note 3, Divestitures, to the Consolidated Financial Statements for further discussion. 2015 adjusted EBITDA was also negatively impacted by reduced volume and reduced coal sales per ton sold, partially offset by decreased cost per ton sold. Volume was negatively impacted by the asset sales previously mentioned and further deterioration in both the thermal and metallurgical markets. We were able to partially offset the effects of the negative volume and pricing through productivity gains and continuing to shift volume to lower cost operations. Longwall operations accounted for 41% of our shipment volume in 2015 versus 31% in 2014.

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Adjusted EBITDA increased in 2014 when compared to 2013 due to the gain on sale of operating and idled thermal coal mines in Kentucky ($20.6 million). See Note 3, Divestitures, to the Consolidated Financial Statements for further discussion. The gains were partially offset by the impact of an increase in per ton operating losses, caused by lower pricing for both metallurgical and thermal coal. The startup of the longwall at the Leer mining complex, the idling and divesting of higher-cost production, and lower sales-sensitive costs contributed to lower per-ton costs, which largely offset the impact of lower sales pricing.

Other Adjusted EBITDA decreased in 2015 and 2014 when compared with the respective prior year due to reduced benefit from coal risk management settlements, and increased liquidated damages on logistics contracts. 2015 was also negatively impacted by reduced volume related to low-priced natural gas, and further deterioration of overseas markets.

Results of Operations

Items impacting comparability of results

We recorded tangible asset impairment and mine closure charges of approximately $2,628.3 million, $24.1 million, and $220.9 million during 2015, 2014 and 2013, respectively.

We recorded goodwill impairment charges of $265.4 million during 2013.

As part of a strategy to divest non-core thermal coal assets, on August 16, 2013, we sold Canyon Fuel Company, LLC (Canyon Fuel) to Bowie Resources, LLC for $422.7 million. Canyon Fuel operated the Sufco and Skyline longwall mining complexes and the Dugout Canyon continuous miner operation in Utah. We recognized a gain on the sale of Canyon Fuel, net of tax, of $77.0 million. The results of Canyon Fuel, including the gain on sale, are presented as discontinued operations. See Note 3 to the Consolidated Financial Statements, Divestitures, for further information.

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

Revenues. Our revenues consist of coal sales and revenues from our ADDCAR subsidiary prior to its disposition in the first quarter of 2014.

Coal sales. The following table summarizes information about our coal sales during the year ended December 31, 2015 and compares it with the information for the year ended December 31, 2014:

	Year Ended December 31, 2015	2014	Increase (Decrease)
	(In thousands)		
Coal sales	$ 2,573,260	$ 2,935,181	$ (361,921)
Tons sold	127,632	134,360	(6,728)

Coal sales decreased in the year ended December 31, 2015 from the year ended December 31, 2014 on a consolidated basis, primarily due to lower tons sold and pricing in our Appalachian segment, resulting in approximately a $274 million reduction in coal sales revenue. Volume reductions accounted for approximately 64% of the decrease and lower prices approximately 36% of the decrease. Lower Powder River Basin and Other tons sold reduced coal sales approximately $34 million and $42 million, respectively. See discussion in Operational Performance above for further information about regional results.

Costs, expenses and other. The following table summarizes costs, expenses and other components of operating income for the year ended December 31, 2015 and compares it with the information for the year ended December 31, 2014:

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	Year Ended December 31, 2015	2014	(Increase) Decrease in Net Loss
	(In thousands)		
Cost of sales (exclusive of items shown separately below)	$ 2,206,433	$ 2,566,193	$ 359,760
Depreciation, depletion and amortization	379,345	418,748	39,403
Amortization of acquired sales contracts, net	(8,811)	(13,187)	(4,376)
Change in fair value of coal derivatives and coal trading activities, net	(1,583)	(3,686)	(2,103)
Asset impairment and mine closure costs	2,628,303	24,113	(2,604,190)
Losses from disposed operations resulting from Patriot Coal bankruptcy	116,343		(116,343)
Selling, general and administrative expenses	98,783	114,223	15,440
Other operating expense (income), net	19,510	(19,754)	(39,264)
Total costs, expenses and other	$ 5,438,323	$ 3,086,650	$ (2,351,673)

Cost of sales. Our cost of sales decreased in the year ended December 31, 2015 from the year ended December 31, 2014, due to lower transportation costs on lower export sales volumes (a decrease of approximately $66 million), lower diesel fuel costs (approximately $88 million), improved productivity at our Leer longwall operation (approximately $28 million), savings associated with one sold and two idled Appalachian complexes (approximately $77 million), lower sales sensitive costs (approximately $30 million), and other savings associated with cost-control efforts across all regions. See discussion in Operational Performance above for information about regional cost results.

Depreciation, depletion and amortization. When compared with the year ended December 31, 2014, depreciation, depletion and amortization costs decreased in the year ended December 31, 2015 due to the effect of lower production and sales volume, continued low capital spending levels, and the effect of the significant asset impairments at the end of the third quarter of 2015.

Asset impairment and mine closure costs. Continued market deterioration, particularly for Appalachian products, was an indicator of impairment of certain assets. Our testing indicated impairment of several active and undeveloped properties. Impairment costs in the year ended December 31, 2015 include a significant portion of our assets at three current operating complexes, and a significant portion of our undeveloped coal reserves value. In the third quarter of 2014, we idled a metallurgical coal mining complex in Appalachia, where we had previously idled two contract mining operations. See Note 5, Impairment Charges and Mine Closure Costs, to the Consolidated Financial Statements for further discussion.

Losses from disposed operations relating to Patriot Coal bankruptcy. In the year ended December 31, 2015 we recorded liabilities related to reclamation and employee obligations that we inherited as a result of the Patriot Coal bankruptcy. See further information regarding the losses related to the Patriot Coal bankruptcy in Note 7, Losses from disposed operations resulting from Patriot Coal bankruptcy to the Consolidated Financial Statements.

Selling, general and administrative expenses. Total selling, general and administrative expenses decreased when compared with the year ended December 31, 2014, primarily due to decreased compensation costs of $13.8 million.

Other operating expense (income), net. When compared with the year ended December 31, 2014, other operating expense (income), net decreased during the year ended December 31, 2015, as a result of increased costs of $16.4 million related to shortfalls under throughput arrangements, and lower net gains from sales of assets of $37.1 million. These were partially offset by a $24 million gain on a contract settlement in 2015.

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Non-operating expense. The following table summarizes non-operating expense for the year ended December 31, 2015 and compares it with the information for the year ended December 31, 2014:

	Year Ended December 31, 2015	2014	(Increase) Decrease in Net Loss $
		(In thousands)	
Net loss resulting from early retirement of debt and debt restructuring	$ (27,910)	$	$ (27,910)

Amounts reported as nonoperating consist of expenses resulting from financing activities, other than interest costs. In 2015, we incurred $24.2 million of legal and financial advisory fees associated with our debt restructuring efforts. Additionally, in the fourth quarter of 2015 we terminated our revolving credit agreement resulting in the write-off of $3.7 million of deferred financing costs.

Provision for (benefit from) income taxes. The following table summarizes our benefit from income taxes for the year ended December 31, 2015 and compares it with the information for the year ended December 31, 2014:

	Year Ended December 31, 2015	2014	Decrease in Net Loss
		(In thousands)	
Provision for (benefit from) income taxes	$ (373,380)	$ 25,634	$ 399,014

The income tax benefit in the year ended December 31, 2015 compared to the income tax provision in the year ended December 31, 2014 was largely due to the approximately $2.6 billion increase in asset impairment losses recorded in the current year partially offset by the increase of a valuation allowance relating to both federal and state net operating loss carryforwards. See further discussion in Note 15, Taxes, to the Consolidated Financial Statements for further discussion.

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

Revenues. Our revenues consist of coal sales and revenues from our ADDCAR subsidiary prior to its disposition in the first quarter of 2014.

Coal sales. The following table compares information about coal sales during the year ended December 31, 2014 with the information for the year ended December 31, 2013:

Year Ended December 31,

	2014	2013	Increase (Decrease)
		(In thousands)	
Coal sales	$ 2,935,181	$ 3,000,476	$ (65,295)
Tons sold	134,360	134,300	60

Coal sales decreased in the year ended December 31, 2014 from the year ended December 31, 2013 on a consolidated basis, primarily due to the impact of lower average per-ton pricing (a decrease of approximately $66 million). Average pricing decreased slightly from $22.34 to $21.85 per ton, primarily due to declines in export shipments, as fluctuations in regional pricing offset each other. See discussion in Operational Performance above for further information about regional results.

Costs, expenses and other. The following table compares costs, expenses and other components of operating income for the year ended December 31, 2014 with the information for the year ended December 31, 2013:

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	Year Ended December 31, 2014	2013 (In thousands)	(Increase) Decrease in Net Loss
Cost of sales (exclusive of items shown separately below)	$ 2,566,193	$ 2,663,136	$ 96,943
Depreciation, depletion and amortization	418,748	426,442	7,694
Amortization of acquired sales contracts, net	(13,187)	(9,457)	3,730
Change in fair value of coal derivatives and coal trading activities, net	(3,686)	7,845	11,531
Asset impairment and mine closure costs	24,113	220,879	196,766
Goodwill impairment		265,423	265,423
Selling, general and administrative expenses	114,223	133,448	19,225
Other operating income, net	(19,754)	(30,218)	(10,464)
Total costs, expenses and other	$ 3,086,650	$ 3,677,498	$ 590,848

Cost of sales. Our cost of sales decreased in the year ended December 31, 2014 from the year ended December 31, 2013, due to a decrease in transportation costs (approximately $83 million) and the sale of the ADDCAR subsidiary ($11.9 million). See discussion in Operational Performance above for information about regional cost results.

Depreciation, depletion and amortization. When compared with the year ended December 31, 2013, depreciation, depletion and amortization costs decreased in the year ended December 31, 2014 due to lower overall production and capital spending levels.

Asset impairment and mine closure costs. In the face of weak coal markets, management has chosen to concentrate metallurgical coal production at our lowest-cost and highest-margin operations. In the third quarter of 2014, we idled an additional metallurgical coal mining complex in Appalachia, where we had previously idled two contract mining operations. In the third quarter of 2013, in response to market conditions, we recorded impairment charges related to a Kentucky coal operation and our highwall mining equipment subsidiary. In addition, we recorded an other-than-temporary impairment of investments in equity method investees and related loans receivable. See further discussion in the Consolidated Financial Statements in Note 5, Impairment Charges and Mine Closure Costs and Note 10, Equity Method Investments and Membership Interests in Joint Ventures.

Goodwill impairment. The remaining $265.4 million of goodwill from the ICG acquisition was impaired in the fourth quarter of 2013, as a result of weakness in the metallurgical coal markets. See further discussion in Critical Accounting Policies below.

Selling, general and administrative expenses. Total selling, general and administrative expenses decreased when compared with the year ended December 31, 2013, due to decreases in legal and professional fees ($6.5 million), lower costs related to our pension plans ($8.5 million), and decreases in discretionary spending.

Other operating expense (income), net. When compared with the year ended December 31, 2013, other operating income, net decreased during the year ended December 31, 2014, primarily as a result of costs of $36.5 million in the year ended December 31, 2014 related to export shortfalls under throughput arrangements (an increase of $24.8 million from the year ended December 31, 2013), and a decrease in realized gains of $26.6 million on derivatives used to manage coal price risk. These were offset by an increase in gains on asset disposals of $22.9 million, primarily from the divestitures of mining operations in the Appalachia region and our ADDCAR subsidiary, and a decrease in contract settlement losses of $10.9 million.

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Non-operating expense. The following table summarizes non-operating expense for the year ended December 31, 2014 and compares it with the information for the year ended December 31, 2013:

	Year Ended December 31, 2014	2013	Decrease in Net Loss $
		(In thousands)	
Net loss resulting from early retirement of debt and debt restructuring	$	$ (42,921)	$ 42,921

Amounts reported as nonoperating consist of expenses resulting from financing activities, other than interest costs. In the fourth quarter of 2013, we retired our 8.75% senior notes due in 2016 and reduced the capacity of our revolving credit facility, in conjunction with a refinancing discussed in the Liquidity and Capital Resources section. As a result, we paid a tender premium and wrote off unamortized discount and fees.

Provision for (benefit from) Income taxes. The following table summarizes our benefit from income taxes for the year ended December 31, 2014 and compares it with the information for the year ended December 31, 2013:

	Year Ended December 31, 2014	2013	Increase in Net Loss
		(In thousands)	
Provision for (benefit from) income taxes	$ 25,634	$ (335,498)	$ (361,132)

The income tax provision in the year ended December 31, 2014 compared to an effective rate of 31% on our pretax loss in the year ended December 31, 2013 was the result of the establishment of a valuation allowance totaling approximately $227 million relating to 2014 federal and state net operating loss carryforwards. See further discussion in Note 15, Taxes, to the Consolidated Financial Statements for further discussion.

Income from discontinued operations, net of tax. The results of our Canyon Fuel subsidiary prior to its divestiture, including the gain on divestiture, are segregated from continuing operations. See further information in Note 3, Divestitures , to the Consolidated Financial Statements.

	Year Ended December 31, 2014	2013	Increase in Net Loss
		(In thousands)	
Income from discontinued operations, net of tax	$	$ 103,396	$ 103,396

Reconciliation of NON-GAAP measures

Segment coal sales per ton sold

Segment coal sales per ton sold are calculated as the segment s coal sales revenues divided by segment tons sold. The segments sales per ton sold are adjusted for transportation costs, and may be adjusted for other items that, due to generally accepted accounting principles, are classified in other income on the statement of operations, but relate to price protection on the sale of coal. Segment sales per ton sold is not a measure of financial performance in accordance with generally accepted accounting principles. We believe segment sales per ton sold better reflects our revenue for the quality of coal sold and our operating results by including all income from coal sales. The adjustments made to arrive at these measures are significant in understanding and assessing our financial condition. Therefore, segment coal sales revenues should not be considered in isolation, nor as an alternative to coal sales revenues under generally accepted accounting principles.

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	Year Ended December 31, 2015	2014	2013
Reported segment coal sales revenues	$ 2,395,258	$ 2,693,898	$ 2,702,865
Coal risk management derivative settlements classified in other income	(3,231)	(5,958)	(32,535)
Transportation costs	181,233	247,241	330,146
Coal sales	2,573,260	2,935,181	3,000,476
Other revenues		1,938	13,881
Revenues in the consolidated statements of operations	$ 2,573,260	$ 2,937,119	$ 3,014,357

Segment cost per ton sold

Segment costs per ton sold are calculated as the segment s cost of coal sales divided by segment tons sold. The segments cost of tons sold are adjusted for transportation costs, and may be adjusted for other items that, due to generally accepted accounting principles, are classified in other income on the statement of operations, but relate directly to the costs incurred to produce coal. Segment cost of tons sold is not a measure of financial performance in accordance with generally accepted accounting principles. We believe segment cost of tons sold better reflects our controllable costs and our operating results by including all costs incurred to produce coal. The adjustments made to arrive at these measures are significant in understanding and assessing our financial condition. Therefore, segment cost of tons sold should not be considered in isolation, nor as an alternative to cost of sales under generally accepted accounting principles.

	Year Ended December 31, 2015	2014	2013
Reported segment cost of coal sales	$ 2,368,100	$ 2,743,182	$ 2,743,766
Diesel fuel risk management derivative settlements classified in other income	(8,162)	(6,789)	(14,939)
Transportation costs	181,233	247,241	330,146
Depreciation, depletion and amortization in reported segment cost of tons sold presented on separate line on statement of operations	(373,299)	(414,379)	(418,736)
Other (other operating segments, operating overhead, etc.)	38,561	(3,062)	22,899
Cost of sales in the consolidated statements of operations	$ 2,206,433	$ 2,566,193	$ 2,663,136

Reconciliation of Segment Adjusted EBITDA to Net Income

The discussion in Results of Operations above includes references to our Adjusted EBITDA. Adjusted EBITDA is defined as net income attributable to the Company before the effect of net interest expense, income taxes, depreciation, depletion and amortization and the amortization of acquired sales contracts. Adjusted EBITDA may also be adjusted for items that may not reflect the trend of future results. We believe that Adjusted EBITDA presents a useful measure of our ability to service existing debt and incur additional debt based on ongoing operations. Investors should be aware that our presentation of Adjusted EBITDA may not be comparable to similarly titled measures used by other companies. The table below shows how we calculate Adjusted EBITDA.

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	Year Ended December 31, 2015	2014	2013
Reported Adjusted EBITDA from coal operations	$ 358,181	$ 365,299	$ 387,435
EBITDA from discontinued operations			173,776
Corporate and other	(108,064)	(85,156)	(135,289)
Adjusted EBITDA	250,117	280,143	425,922
Income tax benefit (provision)	373,380	(25,634)	335,498
Interest expense, net	(393,549)	(383,188)	(374,664)
Depreciation, depletion and amortization	(379,345)	(418,748)	(426,442)
Amortization of acquired sales contracts, net	8,811	13,187	9,457
Asset impairment and mine closure costs	(2,628,303)	(24,113)	(220,879)
Losses from disposed operations resulting from Patriot Coal bankruptcy	(116,343)		
Goodwill impairment			(265,423)
Other nonoperating expenses	(27,910)		(42,921)
Settlement of UMWA legal claims			(12,000)
Interest, depreciation, depletion and amortization classified as discontinued operations			(70,380)
Net loss	$ (2,913,142)	$ (558,353)	$ (641,832)

Corporate and other includes primarily selling, general and administrative expenses, income from our equity investments, certain actuarial adjustments, and certain changes in the fair value of coal derivatives and coal trading activities. Corporate and other adjusted EBITDA decreased $22.9 million in the year ended December 31, 2015 when compared to the year ended December 31, 2014 due to the unfavorable year over year net change in pension settlement and curtailment costs of $23.8 million, further unfavorable year over year net change of $14.7 million in other various actuarial liabilities, and fully reserving an uncollectable customer receivable of $7.8 million. These impacts were partially offset by a $24 million gain on the settlement of a customer contract.

Corporate and other adjusted EBITDA decreased $50.1 million in the year ended December 31, 2014 when compared to the year ended December 31, 2013 due to the favorable year over year net change in pension settlement and curtailment costs of $21.4 million, further favorable year over year net change of $7.4 million in other various actuarial liabilities, an $11.5 million favorable year over year change in the fair value of certain coal derivatives and coal trading activities, and a $5.0 million settlement with Patriot Coal in the year ended December 31, 2013.

Liquidity and Capital Resources

The filing of the Bankruptcy Petitions constituted an event of default that accelerated our obligations under our Debt Instruments, all as further described in Note 26, Subsequent Events , to the Consolidated Financial Statements included in the Form 10-K. Pursuant to the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including most actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property. Accordingly, although the filing of the Bankruptcy Petitions triggered defaults under Debt Instruments, creditors are stayed from taking action as a result of these defaults. Additionally, under Section 502(b)(2) of the Bankruptcy Code, the Company is no longer required to pay interest on its senior unsecured notes and senior secured notes accruing on or after the Petition Date. However, the Debtors will be required to pay interest on amounts borrowed under the Superpriority Secured Debtor-in-Possession Credit Agreement as amended by the Waiver and Consent and Amendment No. 1, dated as of March 4, 2016, (the DIP Credit Agreement).

On December 31, 2015, we had $651.0 million of cash and liquid securities on hand. Based on our current internal financial forecasts, we believe that our cash on hand, cash generated from the results of our operations and funds available under our DIP Credit Agreement will be sufficient to fund anticipated cash requirements until a plan of reorganization is confirmed for minimum operating and capital expenditures and for working capital purposes. However, given the current level of volatility in the market and the unpredictability of certain costs that could potentially arise in our operations, our liquidity needs could be significantly higher than we currently anticipate. In particular, weak coal market industry conditions, depressed

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metallurgical coal prices, reduced steel production and reduced global steel demand may continue to impact our results of operations and our available liquidity.

Securitization Agreement

We are party to an accounts receivable securitization program under which eligible trade receivables are sold, without recourse, to a multi-seller, asset-backed commercial paper conduit. The entity through which these receivables are sold, Arch Receivable Company, LLC, is consolidated into our financial statements but is a non-debtor special purpose vehicle. As of December 31, 2015 we could borrow and request letters of credit to be issued under the facility, and were required to pay facility fees, program fees and letter of credit fees (based on amounts of outstanding letters of credit) and certain other fees (based on amounts withdrawn and unreimbursed letters of credit). The total aggregate letters of credit that can be issued are limited by eligible accounts receivable, as defined under the terms of the securitization agreement. The securitization agreement expires on December 8, 2017.

At December 31, 2015, we had letters of credit outstanding under our securitization program totaling $179 million. We had no borrowing capacity under the facility as the amount of outstanding letters of credit exceeded the borrowing base. Letters of credit can be issued up to the $200 million facility maximum, but amounts above the borrowing base must be backed by cash collateral. Cash collateral supporting outstanding letters of credit at December 31, 2015 was $97.5 million.

On January 13, 2016, we agreed with our securitization financing providers that, subject to certain amendments (the Amendments), they will continue the $200 million trade accounts receivable securitization facility provided to Arch Receivable Company, LLC. Pursuant to the Amendments, which have been approved by the Court on a final basis, we are no longer eligible to borrow amounts under the facility but are allowed to continue to issue letters of credit thereunder. Continuing this facility prevents the need to use either existing cash liquidity or higher cost Debtor-In-Possession financing to support our letters of credit.

Debtor-In-Possession Financing

On January 21, 2016, the Superpriority Secured Debtor-in-Possession Credit Agreement as amended by the Waiver and Consent and Amendment No. 1, dated as of March 4, 2016, (the DIP Credit Agreement) was entered into by and among us, as borrower, certain of the Debtors, as guarantors (the Guarantors and, together with us, the Loan Parties), the lenders from time to time party thereto (the DIP Lenders) and Wilmington Trust, National Association, as administrative agent and collateral agent for the DIP Lenders (in such capacities, the DIP Agent).

The DIP Credit Agreement which has been approved by the Court on a final basis provides for a super-priority senior secured debtor-in-possession credit facility (the DIP Facility) consisting of term loans (collectively, the DIP Term Loan) in the aggregate principal amount of up to $275 million that may be funded in not more than two draws not later than six months after the effective date of the DIP Facility (such six month period, the Availability Period). Any portion of the DIP Term Loan commitment that has not been funded on or prior to the end of the Availability Period will be permanently cancelled.

The maturity date of the DIP Facility is the earliest of (i) January 31, 2017, (ii) the date of the substantial consummation of a plan of reorganization that is confirmed pursuant to an order of the Court, (iii) the consummation of the sale of all or substantially all of the assets of the Loan Parties pursuant to Section 363 of the Bankruptcy Code and (iv) the date the obligations under the DIP Facility are accelerated pursuant to the terms of the DIP Credit Agreement. Borrowings under the DIP Facility bear interest at an interest rate per annum equal to, at the Company s option (i) LIBOR plus 9.00%, subject to a 1.00% LIBOR floor or (ii) the base rate plus 8.00%.

Obligations under the DIP Credit Agreement will be guaranteed on a super-priority senior secured basis by all of our existing and future wholly-owned domestic subsidiaries, and all newly created or acquired wholly-owned domestic subsidiaries, subject to customary limited exceptions.

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The lenders under the DIP Credit Agreement will have a first priority lien on all encumbered and unencumbered assets of the Loan Parties (the DIP Lien), subject to a $75 million carve-out for super-priority claims relating to the Debtors bonding obligations, a customary professional fees carve-out and certain exceptions.

The Loan Parties are subject to certain financial maintenance covenants under the DIP Credit Agreement, including, without limitation, (i) maximum capital expenditures and (ii) minimum liquidity (defined as unrestricted cash and cash equivalents of the Company and its domestic subsidiaries (other than any securitization subsidiary or bonding subsidiary), *plus* withdrawable funds from brokerage accounts of the Company and its domestic subsidiaries (other than any securitization subsidiary or bonding subsidiary) *plus* any unused commitments that are available to be drawn by the Company pursuant to the terms of the DIP Credit Agreement) of (A) $300 million prior to the entry of a final order of the Court approving the DIP facility (the Final Order), which was entered on February 25, 2016 and (B) $500 million following the entry of the Final Order, in each case tested on a monthly basis. The DIP Credit Agreement contains customary affirmative and negative covenants and representations for debtor-in-possession financings. In addition to customary events of default for debtor-in-possession financings, the DIP Credit Agreement contains milestones relating to the Chapter 11 Cases and any failure to comply with such milestones constitutes an event of default.

The DIP Facility is subject to certain usual and customary prepayment events, including 100% of net cash proceeds of (i) debt issuances (other than debt permitted to be incurred under the terms of the DIP Credit Agreement), (ii) non-ordinary course asset sales or dispositions in excess of $50 million in the aggregate (with no individual asset sale or disposition in excess of $7.5 million) and (iii) any casualty event in excess of $50 million in the aggregate, subject to customary reinvestment rights, in each case to be applied to prepay the DIP Term Loan. At a hearing held on February 23, 2016 in the Chapter 11 Cases, the Court approved the DIP Facility on a final basis, overruling the objections of the Creditors Committee and certain other parties who asserted, among other things, that the DIP Financing was unnecessary and argued that the Debtors should enter into an alternate debtor-in-possession financing facility proposed by certain members of the Creditors Committee.

The following is a summary of cash provided by or used in each of the indicated types of activities:

	Year Ended December 31,		
	2015	**2014**	**2013**
	(In thousands)		
Cash provided by (used in):			
Operating activities	$ (44,367)	$ (33,582)	$ 55,742
Investing activities	(180,341)	(111,434)	125,445
Financing activities	(58,742)	(31,852)	(54,710)

Cash used in operating activities increased in the year ended December 31, 2015 compared to the year ended December 31, 2014. Furthermore, cash provided by operating activities in the year ended December 31, 2013 became cash used in operating activities in the year ended December 31, 2014. This trend is primarily due to continued deterioration of the coal markets. We offset some of the impact of this continued deterioration through cost control efforts and concentrating activity at our most efficient operations, and we benefited from lower input costs, particularly diesel fuel. In addition we deferred payment of semi-annual interest on certain unsecured obligations that were due in December 2015 (See Note 13 to the Consolidated Financial Statements, Accrued Expenses and Other Current Liabilities for further discussion).

We used $180.3 million of cash in investing activities during the year ended December 31, 2015, compared to using $111.4 million of cash in the year ended December 31, 2014, and generating $125.4 million of cash in the year ended December 31, 2013. We received $422.7 million from the divestiture of the Canyon Fuel operations in 2013 compared to $46.7 million from divestitures in 2014, and $0.7 million in 2015.

Capital expenditures decreased approximately $28 million and $149 million during 2015 and 2014, respectively, when compared to the previous year due to the startup of the Leer mining complex longwall in the first quarter of 2014 and ongoing cash management efforts. In 2013 we focused our spending on expanding our metallurgical coal production capacity, primarily the Leer Mine development for approximately $119 million,

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net of proceeds from the sale and leaseback of longwall shields. We purchased and sold short term investments that provided $43.5 million in 2015, used $6.3 million in 2014, and used $19.2 million in 2013. Restricted cash increased $91.9 million from 2014 to 2015 primarily due to increased collateral requirements related to outstanding letters of credit.

Cash used in financing activities was approximately $150.6 million, $37.5 million and $54.7 million in 2015, 2014 and 2013, respectively. In 2015 we incurred $24.2 million of legal and financial advisory fees associated with our debt restructuring efforts. In 2013, we borrowed an additional $300.0 million face amount on the term loan and issued $350.0 million 8.00% senior notes due in 2019 to retire 8.75% senior unsecured notes due 2016 for $628.7 million. See further information about our outstanding debt balances in Note 14, Debt and Financing Arrangements to the Consolidated Financial Statements. We decreased the dividend rate from $0.03 per quarter to $0.01 per annum in the first quarter of 2014, and eliminated the dividend in the first quarter of 2015 resulting in no dividends paid in 2015 as compared to $2.1 million in 2014 and $25.5 million in 2013.

Ratio of Earnings to Fixed Charges

The following table sets forth our ratios of earnings to combined fixed charges and preference dividends for the periods indicated:

	Year Ended December 31,				
	2015	**2014**	**2013**	**2012**	**2011**
Ratio of earnings to fixed charges(1)	N/A(2)	N/A(2)	N/A	1.26x	1.25x

(1) Earnings consist of income from continuing operations before income taxes and are adjusted to include only distributed income from affiliates accounted for on the equity method and fixed charges (excluding capitalized interest). Fixed charges consist of interest incurred on indebtedness, the portion of operating lease rentals deemed representative of the interest factor and the amortization of debt expense.

(2) Total losses for the ratio calculation were $2,853.0 million and total fixed charges were $407.1 million for the year ended December 31, 2015. Total losses for the ratio calculation were $120.9 million and total fixed charges were $404.5 million for the year ended December 31, 2014. Total losses for the ratio calculation were $638.3 million and total fixed charges were $450.7 million for the year ended December 31, 2013.

Contractual Obligations

	Payments Due by Period (Dollars in thousands)				
	2016	**2017-2018**	**2019-2020**	**after 2020**	**Total**
Long-term debt, including related interest	$ 375,176	$ 2,508,000	$ 2,491,350	$ 1,033,547	$ 6,408,073
Operating leases	20,857	23,689	5,599	9,807	59,952
Coal lease rights	68,947	27,088	24,291	103,771	224,097

Coal purchase obligations										
Unconditional purchase obligations		94,552		35,954		22,917		11,076		164,499
Total contractual obligations	$	559,532	$	2,594,731	$	2,544,157	$	1,158,201	$	6,856,621

The above table reflects contractual maturities, although $5.1 billion of debt is classified as current due to the default caused by the Company s bankruptcy filing.

The Chapter 11 Cases could materially modify and reduce our obligations. Pursuant to Section 362 of the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against us, including actions to collect indebtedness incurred prior to the Petition date or to exercise control over our property. Subject to certain exceptions under the

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Bankruptcy Code, the filing of our Chapter 11 Cases also automatically stayed the continuation of most legal proceedings, including third party litigation matters described under Item 3, Legal Proceedings, or the filing of other actions against or on behalf of us or our property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of our bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim.

The related interest on long-term debt was calculated using rates in effect at December 31, 2015 for the remaining term of outstanding borrowings.

Coal lease rights represent non-cancelable royalty lease agreements, as well as lease bonus payments due.

Unconditional purchase obligations include open purchase orders and other purchase commitments, which have not been recognized as a liability. The commitments in the table above relate to contractual commitments for the purchase of materials and supplies, payments for services and capital expenditures.

The table above excludes our asset retirement obligations. Our consolidated balance sheet reflects a liability of $410.5 million for asset retirement obligations that arise from SMCRA and similar state statutes, which require that mine property be restored in accordance with specified standards and an approved reclamation plan. Asset retirement obligations are recorded at fair value when incurred and accretion expense is recognized through the expected date of settlement. Determining the fair value of asset retirement obligations involves a number of estimates, as discussed in the section entitled Critical Accounting Policies below, including the timing of payments to satisfy the obligations. The timing of payments to satisfy asset retirement obligations is based on numerous factors, including mine closure dates. Please see the notes to our Consolidated Financial Statements for more information about our asset retirement obligations.

The table above also excludes certain other obligations reflected in our consolidated balance sheet, including estimated funding for pension and postretirement benefit plans and worker s compensation obligations. The timing of contributions to our pension plans varies based on a number of factors, including changes in the fair value of plan assets and actuarial assumptions. Please see the section entitled Critical Accounting Policies below for more information about these assumptions. We expect to make contributions of $0.5 million to our pension plans in 2016, which is impacted by the Moving Ahead for Progress in the 21st Century Act (MAP-21) enacted July 6, 2012. MAP-21 does not reduce our obligations under the plan, but redistributes the timing of required payments by providing near term funding relief for sponsors under the Pension Protection Act.

Please see the notes to our Consolidated Financial Statements for more information about the amounts we have recorded for workers compensation and pension and postretirement benefit obligations.

The table above excludes future contingent payments of up to $58.5 million related to development financing for certain of our equity investees. Our obligation to make these payments, as well as the timing of any payments required, is contingent upon a number of factors, including project development progress, receipt of permits and the obtaining of construction financing.

Off-Balance Sheet Arrangements

In the normal course of business, we are a party to certain off-balance sheet arrangements. These arrangements include guarantees, indemnifications, financial instruments with off-balance sheet risk, such as bank letters of credit and performance or surety bonds. Liabilities related to these arrangements are not reflected in our consolidated balance sheets, and we do not expect any material adverse effects on our financial condition, results of operations or cash flows to result from these off-balance sheet arrangements.

We use a combination of surety bonds, corporate guarantees (e.g., self bonds) and letters of credit to secure our financial obligations for reclamation, workers compensation, coal lease obligations and other obligations as follows as of December 31, 2015:

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	Reclamation Obligations	Lease Obligations	Workers Compensation Obligations	Other	Total
			(Dollars in thousands)		
Self bonding	$ 485,546	$	$	$	$ 485,546
Surety bonds	155,291	49,372	19,534	6,659	230,856
Letters of credit	11,166		117,568	6,790	135,524

In addition, we have agreed to continue to provide surety bonds for certain Magnum obligations, primarily reclamation. The surety bonding amounts are mandated by the state and are not directly related to the estimated cost to reclaim the properties. At December 31, 2015, we had $33.7 million of surety bonds and have posted $30.2 million in letters of credit related to Magnum properties.

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Critical Accounting Policies

We prepare our financial statements in accordance with accounting principles that are generally accepted in the United States. The preparation of these financial statements requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses as well as the disclosure of contingent assets and liabilities. Management bases our estimates and judgments on historical experience and other factors that are believed to be reasonable under the circumstances. Additionally, these estimates and judgments are discussed with our audit committee on a periodic basis. Actual results may differ from the estimates used under different assumptions or conditions. We have provided a description of all significant accounting policies in the notes to our consolidated financial statements. We believe that of these significant accounting policies, the following may involve a higher degree of judgment or complexity:

Derivative Financial Instruments

We utilize derivative instruments to manage exposures to commodity prices. Additionally, we may hold certain coal derivative instruments for trading purposes. Derivative financial instruments are recognized in the balance sheet at fair value. Certain coal contracts may meet the definition of a derivative instrument, but because they provide for the physical purchase or sale of coal in quantities expected to be used or sold by us over a reasonable period in the normal course of business, they are not recognized on the balance sheet.

Certain derivative instruments are designated as the hedge instrument in a hedging relationship. In a cash flow hedge, we hedge the risk of changes in future cash flows related to a forecasted purchase or sale. Changes in the fair value of the derivative instrument used as a hedge instrument in a cash flow hedge are recorded in other comprehensive income. Amounts in other comprehensive income are reclassified to earnings when the hedged transaction affects earnings and are classified in a manner consistent with the transaction being hedged.

We formally document all relationships between hedging instruments and hedged items, as well as our risk management objectives for undertaking various hedge transactions. We evaluate the effectiveness of our hedging relationships both at the hedge inception and on an ongoing basis.

Impairment of Long-lived Assets

We review our long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. These events and circumstances include, but are not limited to, a current expectation that a long-lived asset will be disposed of significantly before the end of its previously estimated useful life, a significant adverse change in the extent or manner in which we use a long-lived asset or a change in its physical condition.

When such events or changes in circumstances occur, a recoverability test is performed comparing projected undiscounted cash flows from the use and eventual disposition of an asset or asset group to its carrying amount. If the projected undiscounted cash flows are less than the carrying amount, an impairment is recorded for the excess of the carrying amount over the estimate fair value, which is generally determined using discounted future cash flows. If we recognize an impairment loss, the adjusted carrying amount of the asset becomes the new cost basis. For a depreciable long-lived asset, the new cost basis will be depreciated (amortized) over the remaining estimated useful life of the asset.

We make various assumptions, including assumptions regarding future cash flows in our assessments of long-lived assets for impairment. The assumptions about future cash flows and growth rates are based on the current and long-term business plans related to the long-lived assets. Discount rate assumptions are based on an assessment of the risk inherent in the future cash flows of the long-lived assets. These assumptions require significant judgments on our part, and the conclusions that we reach could vary significantly based upon these judgments.

For additional information on impairment charges related to this filing, see Note 5, Impairment Charges and Mine Closure Costs in the Consolidated Financial Statements.

Asset Retirement Obligations

Our asset retirement obligations arise from SMCRA and similar state statutes, which require that mine property be restored in accordance with specified standards and an approved reclamation plan. Significant reclamation activities include reclaiming refuse and slurry ponds, reclaiming the pit and support acreage at surface mines, and sealing portals at deep mines. Our asset

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retirement obligations are initially recorded at fair value, or the amount at which the obligations could be settled in a current transaction between willing parties. This involves determining the present value of estimated future cash flows on a mine-by-mine basis based upon current permit requirements and various estimates and assumptions, including estimates of disturbed acreage, reclamation costs and assumptions regarding equipment productivity. We estimate disturbed acreage based on approved mining plans and related engineering data. Since we plan to use internal resources to perform the majority of our reclamation activities, our estimate of reclamation costs involves estimating third-party profit margins, which we base on our historical experience with contractors that perform certain types of reclamation activities. We base productivity assumptions on historical experience with the equipment that we expect to utilize in the reclamation activities. In order to determine fair value, we discount our estimates of cash flows to their present value. We base our discount rate on the rates of treasury bonds with maturities similar to expected mine lives, adjusted for our credit standing.

Accretion expense is recognized on the obligation through the expected settlement date. On at least an annual basis, we review our entire reclamation liability and make necessary adjustments for permit changes as granted by state authorities, changes in the timing and extent of reclamation activities, and revisions to cost estimates and productivity assumptions, to reflect current experience. Any difference between the recorded amount of the liability and the actual cost of reclamation will be recognized as a gain or loss when the obligation is settled. We expect our actual cost to reclaim our properties will be less than the expected cash flows used to determine the asset retirement obligation. At December 31, 2015, our balance sheet reflected asset retirement obligation liabilities of $410.5 million, including amounts classified as a current liability. As of December 31, 2015, we estimate the aggregate undiscounted cost of final mine closures to be approximately $921 million.

See the rollforward of the asset retirement obligation liability in Note 16 to the Consolidated Financial Statements, Asset Retirement Obligations .

Employee Benefit Plans

We have non-contributory defined benefit pension plans covering certain of our salaried and hourly employees. Benefits are generally based on the employee s age and compensation. The actuarially-determined funded status of the defined benefit plans is reflected in the balance sheet.

The calculation of our net periodic benefit costs (pension expense) and benefit obligation (pension liability) associated with our defined benefit pension plans requires the use of a number of assumptions. These assumptions are summarized in Note 21, Employee Benefit Plans , to the Consolidated Financial Statements Changes in these assumptions can result in different pension expense and liability amounts, and actual experience can differ from the assumptions.

- The expected long-term rate of return on plan assets is an assumption reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. We establish the expected long-term rate of return at the beginning of each fiscal year based upon historical returns and projected returns on the underlying mix of invested assets. The pension plan s investment targets are 60% equity and 40% fixed income securities. Investments are rebalanced on a periodic basis to approximate these targeted guidelines. The long-term rate of return assumptions are less than the plan s actual life-to-date returns. Any difference between the actual experience and the assumed experience is recorded in other comprehensive income and amortized into earnings in the future. The impact of lowering the expected long-term rate of return on plan assets 0.5% for 2015 would have been an increase in expense of approximately $1.5 million.

- The discount rate represents our estimate of the interest rate at which pension benefits could be effectively settled. Assumed discount rates are used in the measurement of the projected, accumulated and vested benefit obligations and the service and interest cost components of the net periodic pension cost. In estimating that rate, rates of return on high-quality fixed-income debt instruments are required. We utilize a bond portfolio model that includes bonds that are rated AA or higher with maturities that match the expected benefit payments under the plan. The impact of lowering the discount rate 0.5% for 2015 would have been an increase in expense of approximately $2.8 million.

The differences generated from changes in assumed discount rates and returns on plan assets are amortized into earnings over a five-year period, which represents the average amount of time before participants vest in their benefits.

We also currently provide certain postretirement medical and life insurance coverage for eligible employees. Generally, covered employees who terminate employment after meeting eligibility requirements are eligible for postretirement coverage

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for themselves and their dependents. The salaried employee postretirement benefit plans are contributory, with retiree contributions adjusted periodically, and contain other cost-sharing features such as deductibles and coinsurance.

Actuarial assumptions are required to determine the amounts reported as obligations and costs related to the postretirement benefit plan. The discount rate assumption reflects the rates available on high-quality fixed-income debt instruments at year-end and is calculated in the same manner as discussed above for the pension plan. A change of 0.5% in these assumptions would not have had a significant impact on the benefit costs in 2015 .

Income Taxes

We provide for deferred income taxes for temporary differences arising from differences between the financial statement and tax basis of assets and liabilities existing at each balance sheet date using enacted tax rates expected to be in effect when the related taxes are expected to be paid or recovered. We initially recognize the effects of a tax position when it is more than 50 percent likely, based on the technical merits, that the position will be sustained upon examination, including resolution of the related appeals or litigation processes, if any. Our determination of whether or not a tax position has met the recognition threshold considers the facts, circumstances, and information available at the reporting date.

We reassess our ability to realize our deferred tax assets annually in the fourth quarter, during our annual budget process, or when circumstances indicate that the ability to realize deferred tax assets has changed. The assessment takes into account expectations of future taxable income or loss, available tax planning strategies and the reversal of temporary differences. The development of these expectations involves the use of estimates such as production levels, operating profitability, timing of development activities and the cost and timing of reclamation work. A valuation allowance may be recorded to reflect the amount of future tax benefits that management believes are not likely to be realized. If actual outcomes differ from our expectations, we may record additional valuation allowance through income tax expense in the period such determination is made.

As our recent cumulative losses constitute significant negative evidence with regard to future taxable income, we have relied solely on the expected reversal of taxable temporary differences to support the future realization of our deferred tax assets. We perform a detailed scheduling process of our net taxable temporary differences.

At December 31, 2014, all deductible temporary differences were expected to be realized as there were sufficient deferred tax liabilities within the same jurisdiction and of the same character that are available to offset them. Valuation allowances were established for federal and state net operating losses and tax credits that were not offset by the reversal of other net taxable temporary differences before the expiration of the attribute.

At December 31, 2015, additional losses were realized relating primarily to asset impairment charges. As a result, the expected reversal of taxable temporary differences were not sufficient to support the future realization of the deferred tax assets and an additional $865.1 million valuation allowance was recorded. The total deferred tax assets are completely offset by a valuation allowance.

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

We manage our commodity price risk for our non-trading, thermal coal sales through the use of long-term coal supply agreements, and to a limited extent, through the use of derivative instruments. Sales commitments in the metallurgical coal market are typically not long-term in nature, and we are therefore subject to fluctuations in market pricing.

Our commitments for 2016 and 2017 are as follows:

	2016			2017		
	Tons (in millions)		$ per ton	Tons (in millions)		$ per ton
Powder River Basin						
Committed, Priced	69.8	$	13.34	37.8	$	13.84
Committed, Unpriced	4.8			9.0		
Appalachia						
Committed, Priced Thermal	3.7	$	54.36	2.1	$	45.35
Committed, Unpriced Thermal						
Committed, Priced Metallurgical	1.9	$	71.57	1.4	$	77.03
Committed, Unpriced Metallurgical	0.7			0.7		
Other Bituminous						
Committed, Priced	4.0	$	32.15	3.3	$	33.33
Committed, Unpriced						

We are also exposed to commodity price risk in our coal trading activities, which represents the potential future loss that could be caused by an adverse change in the market value of coal. Our coal trading portfolio included forward, swap and put and call option contracts at December 31, 2015. The estimated future realization of the value of the trading portfolio is $5.8 million of gains in 2016.

We monitor and manage market price risk for our trading activities with a variety of tools, including Value at Risk (VaR), position limits, management alerts for mark to market monitoring and loss limits, scenario analysis, sensitivity analysis and review of daily changes in market dynamics. Management believes that presenting high, low, end of year and average VaR is the best available method to give investors insight into the level of commodity risk of our trading positions. Illiquid positions, such as long-dated trades that are not quoted by brokers or exchanges, are not included in VaR.

VaR is a statistical one-tail confidence interval and down side risk estimate that relies on recent history to estimate how the value of the portfolio of positions will change if markets behave in the same way as they have in the recent past. While presenting VaR will provide a similar framework for discussing risk across companies, VaR estimates from two independent sources are rarely calculated in the same way. Without a thorough understanding of how each VaR model was calculated, it would be difficult to compare two different VaR calculations from different sources. The level of confidence is 95%. The time across which these possible value changes are being estimated is through the end of the next business day. A closed-form delta-neutral method used throughout the finance and energy sectors is employed to calculate this VaR. VaR is back tested to verify usefulness.

On average, portfolio value should not fall more than VaR on 95 out of 100 business days. Conversely, portfolio value declines of more than VaR should be expected, on average, 5 out of 100 business days. When more value than VaR is lost due to market price changes, VaR is not representative of how much value beyond VaR will be lost.

During the year ended December 31, 2015, VaR for our coal trading positions that are recorded at fair value through earnings ranged from under $0.1 million to $0.9 million. The linear mean of each daily VaR was $0.4 million. The final VaR at December 31, 2015 was $0.1 million.

We are exposed to fluctuations in the fair value of coal derivatives that we enter into to manage the price risk related to future coal sales, but for which we do not elect hedge accounting. Any gains or losses on these derivative instruments would be offset in the pricing of the physical coal sale. During the year ended December 31, 2015 VaR for our risk management positions that are recorded at fair value through earnings ranged from $0.1 million to $0.5 million. The linear mean of each daily VaR was $0.2 million. The final VaR at December 31, 2015 was $0.1 million.

We are also exposed to the risk of fluctuations in cash flows related to our purchase of diesel fuel. We expect to use approximately 50 to 58 million gallons of diesel fuel for use in our operations during 2016. We may enter into forward physical purchase contracts, as well as purchased heating oil options, to reduce volatility in the price of diesel fuel for our operations. At December 31, 2015, we had purchased heating oil call options for approximately 56 million gallons for the purpose of protecting against substantial increases in pricerelating to 2015 diesel purchases. These positions reduce our risk of cash flow fluctuations related to these surcharges but the positions are not accounted for as hedges. A $0.25 per gallon decrease in the price of heating oil would not result in an increase in our expense related to the heating oil derivatives. We also at times have purchased heating oil call options to manage the price risk associated with fuel surcharges on barge and rail shipments, which cover increases in diesel fuel prices. At December 31, 2015, we had no positions outstanding for this purpose.

We are exposed to market risk associated with interest rates due to our existing level of indebtedness. At December 31, 2015, of our $5.1 billion principal amount of debt outstanding, approximately $1.9 billion of outstanding borrowings have interest rates that fluctuate based on changes in the market rates. An increase in the interest rates related to these borrowings of 25 basis points would not result in an annualized increase in interest expense based on interest rates in effect at December 31, 2015, because our term loan has a minimum interest rate that exceeds the current market rates.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

The Consolidated Financial Statements and consolidated financial statement schedule of Arch Coal, Inc. and subsidiaries are included in this Annual Report on Form 10-K beginning on page F-1.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES.

We performed an evaluation under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of December 31, 2015. Based on that evaluation, our management, including our chief executive officer and chief financial officer, concluded that the disclosure controls and procedures were effective as of such date. There were no changes in our internal control over financial reporting during the fiscal quarter to which this report relates that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We incorporate by reference the opinion of independent registered public accounting firm and management s report on internal control over financial reporting included on pages F-3 and F-4, respectively, of this Annual Report on Form 10-K.

ITEM 9B. OTHER INFORMATION.

None.

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PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE.

Except for the disclosures contained in Part I of this report under the caption Executive Officers , the information required under this item is incorporated herein by reference in an amendment to this Annual Report on Form 10-K, which will be filed within 120 days after the close of our Company s 2015 fiscal year.

ITEM 11. EXECUTIVE COMPENSATION.

The information required under this item is incorporated herein by reference in an amendment to this Annual Report on Form 10-K, which will be filed within 120 days after the close of our Company s 2015 fiscal year.

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

Except as provided below, the information required under this item is incorporated herein by reference in an amendment to this Annual Report on Form 10-K, which will be filed within 120 days after the close of our Company s 2015 fiscal year.

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

The information required by Items 404 and 407(a) of Regulation S-K is included under the caption Directors and Corporate Governance Practices in an amendment to this Annual Report on Form 10-K, which will be filed within 120 days after the close of our Company s 2015 fiscal year.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES.

The following table sets forth the fees accrued or paid to Ernst & Young LLP, the Company s independent registered public accounting firm, for the years ended December 31, 2015 and December 31, 2014:

Service	Fee 2015		2014	
Audit(1)	$	2,327,680	$	1,989,282
Audit-Related(2)		48,636		0
Tax(3)		6,500		14,500
All Other				0

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(1) Audit fees include fees for professional services rendered by Ernst & Young LLP for the audits of our annual consolidated financial statements and report on internal control over financial reporting, the review procedures on the consolidated financial statements included in our Forms 10-Q, as well as the statutory audits of our international subsidiaries and other services related to Securities and Exchange Commission filings, including comfort letters and consents.

(2) Audit-related fees include fees for the carve-out audits of a certain entity.

(3) Tax fees consist of amounts billed for tax compliance matters.

The Audit Committee has adopted an audit and non-audit services pre-approval policy that requires the Audit Committee, or the chairman of the Audit Committee, to pre-approve services to be provided by our independent registered public accounting firm. The Audit Committee will consider whether the services to be provided by the independent registered

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public accounting firm are prohibited by the SEC s rules on auditor independence and whether the independent registered public accounting firm is best positioned to provide the most effective and efficient service. The Audit Committee is mindful of the relationship between fees for audit and non-audit services in deciding whether to pre-approve such services. The Audit Committee has delegated to the chairman of the Audit Committee pre-approval authority between committee meetings, and the chairman must report any pre-approval decisions to the committee at the next regularly scheduled committee meeting. All non-audit services performed by Ernst & Young LLP in 2015 and 2014 were pre-approved in accordance with the procedures established by the Audit Committee.

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PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

Financial Statements

Reference is made to the index set forth on page F-1 of this report.

Financial Statement Schedules

The following financial statement schedule of Arch Coal, Inc. is at the page indicated:

Schedule	Page
Valuation and Qualifying Accounts	F-63

All other financial statement schedules listed under SEC rules but not included in this report are omitted because they are not applicable or the required information is provided in the notes to our consolidated financial statements.

Exhibits

Reference is made to the Exhibit Index beginning on page 87 of this report.

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Signatures

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Arch Coal, Inc.

/s/ John W. Eaves
John W. Eaves
Chairman and Chief Executive Officer
March 15, 2016

Signatures	Capacity	Date
/s/ John W. Eaves John W. Eaves	Chairman and Chief Executive Officer, (Principal Executive Officer)	March 15, 2016
/s/ John T. Drexler John T. Drexler	Senior Vice President and Chief Financial Officer (Principal Financial Officer) (Principal Accounting Officer)	March 15, 2016
* David D. Freudenthal	Director	March 15, 2016
* Patricia F. Godley	Director	March 15, 2016
* Paul T. Hanrahan	Director	March 15, 2016
* Douglas H. Hunt	Director	March 15, 2016

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* J. Thomas Jones	Director	March 15, 2016
* Paul A. Lang	Director	March 15, 2016
* George C. Morris III	Director	March 15, 2016
* Theodore D. Sands	Director	March 15, 2016
* Wesley M. Taylor	Director	March 15, 2016
* Peter I. Wold	Director	March 15, 2016

*By /s/ Robert G. Jones
Robert G. Jones,
Attorney-in-Fact

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Exhibit Index

Exhibit	Description
3.1	Restated Certificate of Incorporation of Arch Coal, Inc. (incorporated herein by reference to Exhibit 3.1 to the registrant s Current Report on Form 8-K filed on May 5, 2006).
3.2	Arch Coal, Inc. Bylaws, as amended effective as of February 25, 2015 (incorporated herein by reference to Exhibit 3.1 to the registrant s Current Report on Form 8-K filed on February 27, 2015).
4.1	Indenture, dated as of August 9, 2010, by and between Arch Coal, Inc. and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant s Current Report on Form 8-K filed on August 9, 2010)
4.2	First Supplemental Indenture, dated as of August 9, 2010, by and among Arch Coal, Inc., the subsidiary guarantors named therein, and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.2 to the registrant s Current Report on Form 8-K filed on August 9, 2010)
4.3	Second Supplemental Indenture, dated as of December 16, 2010, by and among Arch Coal West, LLC, Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.7 to the registrant s Annual Report on Form 10-K for the period ended December 31, 2010).
4.4	Third Supplemental Indenture, dated as of June 24, 2011, by and among Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.13 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).
4.5	Fourth Supplemental Indenture, dated as of October 7, 2011, by and among Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.14 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).

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4.6	Fifth Supplemental Indenture, dated as of July 2, 2012, by and among Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.2 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2012).
4.7	Sixth Supplemental Indenture, dated as of July 31, 2012, by and among Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.5 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2012).
4.8	Seventh Supplemental Indenture, dated as of July 26, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.2 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2013).
4.9	Eighth Supplemental Indenture, dated December 2, 2013, by and among Arch Coal, Inc. the subsidiary guarantors named therein and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.21 to the registrant s Annual Report on Form 10-K for the period ended December 31, 2013).
4.10	Indenture, dated as of June 14, 2011, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant s Current Report on Form 8-K filed on June 14, 2011).
4.11	First Supplemental Indenture, dated as of July 5, 2011, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.16 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).
4.12	Second Supplemental Indenture, dated as of October 7, 2011, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.17 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).
4.13	Third Supplemental Indenture, dated as of July 2, 2012, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.3 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2012).
4.14	Fourth Supplemental Indenture, dated as of July 31, 2012, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.6 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2012).
4.15	Fifth Supplemental Indenture, dated as of July 26, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.3 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2013).
4.16	Sixth Supplemental Indenture, dated as of December 2, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association (incorporated herein by reference to Exhibit 4.28 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2013).
4.17	Indenture, dated as of November 21, 2012, among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant s Current Report on Form 8-K filed on November 26, 2012).
4.18	First Supplemental Indenture, dated as of July 26, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.4 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2013).
4.19	Second Supplemental Indenture, dated as of December 2, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.31 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2013).
4.2	Indenture, dated as of December 17, 2013, by and among Arch Coal, Inc., the subsidiary guarantors named therein and UMB Bank National Association, as trustee and collateral agent (incorporated herein by reference to Exhibit 4.1 to the registrant s Current Report on Form 8-K filed on December 17, 2013).

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10.1	Amended and Restated Credit Agreement, dated as of June 14, 2011, by and among the Company, the lenders party thereto, PNC Bank, National Association, as administrative agent and Bank of America, N.A., The Royal Bank of Scotland PLC and Citibank, N.A., as co-documentation agents (incorporated herein by reference to Exhibit 10.1 to the Current Report on Form 8-K filed by the registrant on June 17, 2011).
10.2	Incremental Amendment, dated as of November 21, 2012, by and among Arch Coal, Inc., as Borrower, the guarantors party thereto, the incremental term loan lenders party thereto, Bank of America, N.A., as Term Loan Administrative Agent, and Merrill Lynch, Pierce, Fenner & Smith Incorporated, PNC Capital Markets LLC, Morgan Stanley Senior Funding, Inc., Citigroup Global Markets Inc., Credit Suisse Securities (USA) LLC, BBVA Securities Inc., RBS Securities Inc. and Union Bank, N.A., as Lead Arrangers, as Lead Arrangers (incorporated herein by reference to Exhibit 10.1 to the registrant s Current Report on Form 8-K filed on November 26, 2012).
10.3	First Amendment to Amended and Restated Credit Agreement, dated as of May 16, 2012, by and among Arch Coal, Inc., as Borrower, the guarantors party thereto, the lenders party thereto, and PNC Bank, National Association, as Revolver Administrative Agent (incorporated herein by reference to Exhibit 10.1 to the registrant s Current Report on Form 8-K filed on May 17, 2012).
10.4	Second Amendment to Amended and Restated Credit Agreement, dated as of November 21, 2012, by and among Arch Coal, Inc., as Borrower, the guarantors party thereto, the lenders party thereto, Bank of America, N.A., as Term Loan Administrative Agent, and PNC Bank, National Association, as Revolver Administrative Agent (incorporated herein by reference to Exhibit 10.2 to the registrant s Current Report on Form 8-K filed on November 26, 2012).
10.5	Third Amendment to Amended and Restated Credit Agreement, dated as of November 21, 2012, by and among Arch Coal, Inc., as Borrower, the guarantors party thereto, the revolver lenders party thereto and PNC Bank, National Association, as Revolver Administrative Agent (incorporated herein by reference to Exhibit 10.3 to the registrant s Current Report on Form 8-K filed on November 26, 2012).
10.6	Amendment Number Four to Amended and Restated Credit Agreement, dated as of December 17, 2013, by and among Arch Coal, Inc., as Borrower, the guarantors party thereto, the lenders party thereto, Bank of America, N.A., as term loan administrative agent, and PNC Bank, National Association, as Revolver Administrative Agent (incorporated herein by reference to Exhibit 10.1 to the registrant s Current Report on Form 8-K filed on December 17, 2013).
10.7*	Form of Employment Agreement for Executive Officers of Arch Coal, Inc. (incorporated herein by reference to Exhibit 10.4 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).

10.8	Coal Lease Agreement dated as of March 31, 1992, among Allegheny Land Company, as lessee, and UAC and Phoenix Coal Corporation, as lessors, and related guarantee (incorporated herein by reference to the Current Report on Form 8-K filed by Ashland Coal, Inc. on April 6, 1992).
10.9	Federal Coal Lease dated as of June 24, 1993 between the U.S. Department of the Interior and Southern Utah Fuel Company (incorporated herein by reference to Exhibit 10.17 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.10	Federal Coal Lease between the U.S. Department of the Interior and Utah Fuel Company (incorporated herein by reference to Exhibit 10.18 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.11	Federal Coal Lease dated as of July 19, 1997 between the U.S. Department of the Interior and Canyon Fuel Company, LLC (incorporated herein by reference to Exhibit 10.19 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.12	Federal Coal Lease dated as of January 24, 1996 between the U.S. Department of the Interior and the Thunder Basin Coal Company (incorporated herein by reference to Exhibit 10.20 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.13	Federal Coal Lease Readjustment dated as of November 1, 1967 between the U.S. Department of the Interior and the Thunder Basin Coal Company (incorporated herein by reference to Exhibit 10.21 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.14	Federal Coal Lease effective as of May 1, 1995 between the U.S. Department of the Interior and Mountain Coal Company (incorporated herein by reference to Exhibit 10.22 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.15	Federal Coal Lease dated as of January 1, 1999 between the Department of the Interior and Ark Land Company (incorporated herein by reference to Exhibit 10.23 to the registrant s Annual Report on Form 10-K for the year ended December 31, 1998).
10.16	Federal Coal Lease dated as of October 1, 1999 between the U.S. Department of the Interior and Canyon Fuel Company, LLC (incorporated herein by reference to Exhibit 10 to the registrant s Quarterly Report on Form 10-Q for the quarter ended September 30, 1999).
10.17	Federal Coal Lease effective as of March 1, 2005 by and between the United States of America and Ark Land LT, Inc. covering the tract of land known as Little Thunder in Campbell County, Wyoming (incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K filed by the registrant on February 10, 2005).
10.18	Modified Coal Lease (WYW71692) executed January 1, 2003 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as North Rochelle in Campbell County, Wyoming (incorporated by reference to Exhibit 10.24 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2004).
10.19	Coal Lease (WYW127221) executed January 1, 1998 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as North Roundup in Campbell County, Wyoming (incorporated by reference to Exhibit 10.24 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2004).
10.20*	Form of Indemnity Agreement between Arch Coal, Inc. and Indemnitee (as defined therein) (incorporated herein by reference to Exhibit 10.15 to the Registration Statement on Form S-4 (Registration No. 333-28149) filed by the registrant on May 30, 1997).
10.21*	Arch Coal, Inc. Incentive Compensation Plan For Executive Officers (incorporated herein by reference to Appendix B to the proxy statement on Schedule 14A filed by the registrant on March 22, 2010).
10.22*	Arch Coal, Inc. Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.26 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2014).
10.23*	Arch Coal, Inc. Omnibus Incentive Plan (incorporated herein by reference to Exhibit 10.1 to the registrant s Quarterly Report on Form 10-Q filed on May 8, 2013).
10.24*	Arch Mineral Corporation 1996 ERISA Forfeiture Plan (incorporated herein by reference to Exhibit 10.20 to the Registration Statement on Form S-4 (Registration No. 333-28149) filed by the registrant on May 30, 1997).
10.25*	Arch Coal, Inc. Outside Directors Deferred Compensation Plan (incorporated herein by reference to Exhibit 10.4 of the registrant s Current Report on Form 8-K filed on December 11, 2008).
10.26*	Arch Coal, Inc. Supplemental Retirement Plan (as amended on December 5, 2008) (incorporated herein by reference to Exhibit 10.2 to the registrant s Current Report on Form 8-K filed on December 11, 2008).
10.27*	Form of Restricted Stock Unit Contract (incorporated herein by reference to Exhibit 10.5 to the registrant s Current Report on Form 8-K filed on February 24, 2006).
10.28*	Form of Non-Qualified Stock Option Agreement (for stock options granted prior to February 21, 2008) (incorporated herein by reference to Exhibit 10.35 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2006).
10.29*	

	Form of 2008 Restricted Stock Unit Contract for Messrs. Leer and Eaves (incorporated herein by reference to Exhibit 10.3 to the registrant s Current Report on Form 8-K filed on February 27, 2008).
10.30*	Form of 2008 Non-Qualified Stock Option Agreement for Messrs. Leer and Eaves (incorporated herein by reference to Exhibit 10.4 to the registrant s Current Report on Form 8-K filed on February 27, 2008).

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10.31*	Form of Non-Qualified Stock Option Agreement (for stock options granted on or after February 21, 2008) (incorporated herein by reference to Exhibit 10.5 to the registrant s Current Report on Form 8-K filed on February 27, 2008).
10.32*	Form of Non-Qualified Stock Option Agreement (incorporated herein by reference to Exhibit 10.3 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2013).
10.33*	Form of Performance Unit Contract (incorporated herein by reference to Exhibit 10.2 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2013).
10.34*	Form of 2011 Non-Qualified Stock Option Agreement (incorporated herein by reference to Exhibit 10.1 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2012).
10.35*	Form of 2011 Restricted Stock Unit Contract (incorporated herein by reference to Exhibit 10.2 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2012).
10.36*	Form of 2011 Restricted Stock Unit Contract for Non-Employee Directors (incorporated herein by reference to Exhibit 10.3 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2012).
10.37*	Form of 2011 Performance Unit Contract (incorporated herein by reference to Exhibit 10.4 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2012).
10.38*	Form of Restricted Stock Unit Contract (incorporated herein by reference to Exhibit 10.4 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2013).
10.39*	Form of Restricted Stock Unit Contract for Non-Employee Directors (incorporated herein by reference to Exhibit 10.5 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2013).
10.40*	Form of Director Indemnity Agreement (incorporated herein by reference to Exhibit 10.40 to the registrant s Annual Report on Form 10-K for the period ended December 31, 2010).
10.41*	Form of Performance Shares Contract (incorporated by reference to Exhibit 10.1 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2014).

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10.42	Amended and Restated Receivables Purchase Agreement, dated as of February 24, 2010, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc., Market Street Funding LLC, as issuer, the financial institutions from time to time party thereto, as LC Participants, and PNC Bank, National Association, as Administrator on behalf of the Purchasers and as LC Bank (incorporated herein by reference to Exhibit 10.2 to the registrant s Quarterly Report on Form 10-Q for the period ended March 31, 2010).
10.43	First Amendment to Amended and Restated Receivables Purchase Agreement, dated January 31, 2011, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc. and the other parties thereto (incorporated by reference to Exhibit 10.41 to the registrant s Annual Report on Form 10-K for the period ended December 31, 2010).
10.44	Second Amendment to Amended and Restated Receivables Purchase Agreement dated June 15, 2011 (incorporated by reference to Exhibit 10.5 to the registrant s Quarterly Report on Form 10-Q for the period ended June 30, 2011).
10.45	Third Amendment to Amended and Restated Receivables Purchase Agreement dated November 21, 2011, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc. and the other parties thereto (incorporated herein by reference to Exhibit 10.38 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).
10.46	Fourth Amendment to Amended and Restated Receivables Purchase Agreement dated December 13, 2011, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc. and the other parties thereto (incorporated herein by reference to Exhibit 10.39 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2011).
10.47	Fifth Amendment to Amended and Restated Receivables Purchase Agreement dated December 11, 2012, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc. and the other parties thereto (incorporated herein by reference to Exhibit 10.45 to the registrant s Annual Report on Form 10-K for the period ended December 31, 2012).
10.48	Sixth Amendment to Amended and Restated Receivables Purchase Agreement dated October 4, 2013, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc., and the other parties thereto (incorporated herein by reference to Exhibit 10.51 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2013).
10.49	Seventh Amendment to Amended and Restated Receiveables Purchase Agreement dated December 10, 2013, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc., and the other parties thereto (incorporated herein by reference to Exhibit 10.52 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2013).
10.50	Eighth Amendment to Amended and Restated Receivables Purchase Agreement dated October 28, 2014, among Arch Receivables Company, LLC, Arch Coal Sales Company, Inc., and the other parties thereto (incorporated by reference to Exhibit 10.54 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2014).
10.51	Ninth Amendment to Amended and Restated Receivables Purchase Agreement, dated December 29, 2014, among Arch Receivables Company, LLC, Arch Coal Sales Company, Inc., and the other parties thereto (incorporated herein by reference to Exhibit 10.55 to the registrant s Annual Report on Form 10-K for the year ended December 31, 2014).
10.52	Second Supplemental Indenture dated as of July 16, 2015 among Arch Coal, Inc., the guarantors party thereto and U.S. Bank National Association, as trustee (incorporated herein by reference to Exhibit 4.1 to the registrant s Current Report on Form 8-K filed on July 17, 2015).
10.53	Superpriority Senior Secured Debtor in Possession Credit Agreement, dated as of January 21, 2016, by and among Arch Coal, Inc., subsidiaries of Arch Coal, Inc. from time to time party thereto as guarantors, the lenders from time to time party thereto and the Agent (as defined therein).
10.54	Second Amended and Restated Receivables Purchase Agreement, dated as of January 13, 2016, among Arch Receivable Company, LLC, Arch Coal Sales Company, Inc. and the other parties thereto.
10.55	Restructuring Support Agreement, dated as of January 10, 2016, by and among the Debtors (as defined therein) and the Consenting Lenders (as defined therein) (incorporated herein by reference to Exhibit 10.1 to the registrant s Current Report on Form 8-K filed on January 11, 2016).
10.56	Waiver and Consent and Amendment No. 1, dated as of March 4, 2016, to the Superpriority Senior Debtor-in-Possession Credit Agreement, by and among Arch Coal, Inc., subsidiaries of Arch Coal, Inc. from time to time party thereto as guarantors, the lenders from time to time party thereto and the Agent (as defined therein).
10.57	First Amendment to Restructuring Support Agreement dated as of February 25, 2016 by and among the Debtors (as defined therein) and the Consenting Lenders (as defined therein).
12.1	Computation of ratio of earnings to combined fixed charges and preference dividends.
21.1	Subsidiaries of the registrant.
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Weir International, Inc.
24.1	Power of Attorney.
31.1	Rule 13a-14(a)/15d-14(a) Certification of John W. Eaves.
31.2	Rule 13a-14(a)/15d-14(a) Certification of John T. Drexler.
32.1	Section 1350 Certification of John W. Eaves.
32.2	Section 1350 Certification of John T. Drexler.

95	Mine Safety Disclosure Exhibit.
101	Interactive Data File (Form 10-K for the year ended December 31, 2015 filed in XBRL). The financial information contained in the XBRL-related documents is unaudited and unreviewed.

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* Denotes management contract or compensatory plan arrangements.

FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Arch Coal, Inc.

We have audited the accompanying consolidated balance sheets of Arch Coal, Inc. and subsidiaries (the Company) as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), stockholders equity, and cash flows for each of the three years in the period ended December 31, 2015. Our audits also included the financial statement schedule listed in the Index at Item 15. These financial statements and schedule are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements and schedule 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of Arch Coal, Inc. and subsidiaries at December 31, 2015 and 2014, and the consolidated results of their operations and their cash flows for each of the three years in the period ended December 31, 2015, in conformity with U.S. generally accepted accounting principles. Also, in our opinion, the related financial statement schedule, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects the information set forth therein.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1, to the consolidated financial statements, the Company has recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management s plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Arch Coal, Inc. s internal control over financial reporting as of December 31, 2015, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 15, 2016 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

St. Louis, Missouri

March 15, 2016

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders of Arch Coal, Inc.

We have audited Arch Coal, Inc. and subsidiaries (the Company s) internal control over financial reporting as of December 31, 2015, based on criteria established in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). Arch Coal, Inc. and subsidiaries management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management s Report on Internal 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, and 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.

In our opinion, Arch Coal, Inc. and subsidiaries maintained, in all material respects, effective internal control over financial reporting as of December 31, 2015, 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 Arch Coal, Inc. and subsidiaries as of December 31, 2015 and 2014, and the related consolidated statements of operations, comprehensive income (loss), stockholders equity, and cash flows for each of the three years in the period ended December 31, 2015, and our report dated March 15, 2016, expressed an unqualified opinion thereon that included an explanatory paragraph regarding Arch Coal, Inc. s ability to continue as a going concern.

/s/ Ernst & Young LLP

St. Louis, Missouri

March 15, 2016

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REPORT OF MANAGEMENT

The management of Arch Coal, Inc. (the Company) is responsible for the preparation of the consolidated financial statements and related financial information in this annual report. The financial statements are prepared in accordance with accounting principles generally accepted in the United States and necessarily include some amounts that are based on management s informed estimates and judgments, with appropriate consideration given to materiality.

The Company maintains a system of internal accounting controls designed to provide reasonable assurance that financial records are reliable for purposes of preparing financial statements and that assets are properly accounted for and safeguarded. The concept of reasonable assurance is based on the recognition that the cost of a system of internal accounting controls should not exceed the value of the benefits derived. The Company has a professional staff of internal auditors who monitor compliance with and assess the effectiveness of the system of internal accounting controls.

The Audit Committee of the Board of Directors, comprised of independent directors, meets regularly with management, the internal auditors, and the independent auditors to discuss matters relating to financial reporting, internal accounting control, and the nature, extent and results of the audit effort. The independent auditors and internal auditors have full and free access to the Audit Committee, with and without management present.

MANAGEMENT S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The management of Arch Coal, Inc. (the Company) is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Securities Exchange Act Rule 13a-15(f). Our internal control over financial reporting is a process designed under the supervision of our principal executive officer and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

Because of its inherent limitations, internal control over financial reporting may not detect or prevent misstatements. Projections of any evaluation of the 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 processes may deteriorate.

Under the supervision and with the participation of the Company s management, including its principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting as of December 31, 2015 based on the criteria set forth in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation, management concluded that the Company s internal control over financial reporting is effective as of December 31, 2015.

The Company s independent registered public accounting firm, Ernst & Young LLP, has issued an audit opinion on the Company s internal control over financial reporting as of December 31, 2015.

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Arch Coal, Inc. and Subsidiaries

Consolidated Statements of Operations

(in thousands, except per share data)

	Year Ended December 31, 2015	2014	2013
Revenues	$ 2,573,260	$ 2,937,119	$ 3,014,357
Costs, expenses and other operating			
Cost of sales (exclusive of items shown separately below)	2,206,433	2,566,193	2,663,136
Depreciation, depletion and amortization	379,345	418,748	426,442
Amortization of acquired sales contracts, net	(8,811)	(13,187)	(9,457)
Change in fair value of coal derivatives and coal trading activities, net	(1,583)	(3,686)	7,845
Asset impairment and mine closure costs	2,628,303	24,113	220,879
Goodwill impairment			265,423
Losses from disposed operations resulting from Patriot Coal bankruptcy	116,343		
Selling, general and administrative expenses	98,783	114,223	133,448
Other operating expense (income), net	19,510	(19,754)	(30,218)
	5,438,323	3,086,650	3,677,498
Loss from operations	(2,865,063)	(149,531)	(663,141)
Interest expense, net			
Interest expense	(397,979)	(390,946)	(381,267)
Interest and investment income	4,430	7,758	6,603
	(393,549)	(383,188)	(374,664)
Nonoperating expense			
Net loss resulting from early retirement of debt and debt restructuring	(27,910)		(42,921)
Loss from continuing operations before income taxes	(3,286,522)	(532,719)	(1,080,726)
Provision for (benefit from) income taxes	(373,380)	25,634	(335,498)
Loss from continuing operations	(2,913,142)	(558,353)	(745,228)
Income from discontinued operations, including gain on sale - net of tax			103,396
Net loss	(2,913,142)	(558,353)	(641,832)
Losses per common share			
Basic and diluted LPS- Loss from continuing operations	$ (136.86)	$ (26.31)	$ (35.15)
Basic and diluted LPS - Net loss	$ (136.86)	$ (26.31)	$ (30.26)
Basic and diluted weighted average shares outstanding	21,285	21,222	21,210
Dividends declared per common share	$	$ 0.10	$ 1.20

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

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Arch Coal, Inc. and Subsidiaries

Consolidated Statements of Comprehensive Income (Loss)

(in thousands)

	Year Ended December 31, 2015	2014	2013
Net loss	$ (2,913,142)	$ (558,353)	$ (641,832)
Derivative instruments			
Comprehensive income (loss) before tax	(3,477)	3,102	(2,626)
Income tax benefit (provision)	1,252	(1,117)	947
	(2,225)	1,985	(1,679)
Pension, postretirement and other post-employment benefits			
Comprehensive income (loss) before tax	(5,592)	(44,143)	77,201
Income tax benefit (provision)	2,011	15,891	(27,803)
	(3,581)	(28,252)	49,398
Available-for-sale securities			
Comprehensive income (loss) before tax	1,185	(12,788)	10,190
Income tax benefit (provision)	(435)	4,604	(3,710)
	750	(8,184)	6,480
Total other comprehensive income (loss)	(5,056)	(34,451)	54,199
Total comprehensive loss	$ (2,918,198)	$ (592,804)	$ (587,633)

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

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Arch Coal, Inc. and Subsidiaries

Consolidated Balance Sheets

(in thousands, except per share data)

	December 31, 2015	December 31, 2014
Assets		
Current assets		
Cash and cash equivalents	$ 450,781	$ 734,231
Short term investments	200,192	248,954
Restricted cash	97,542	5,678
Trade accounts receivable (net of allowance for doubtful accounts of $7.8 million and $0.2 million, respectively)	117,405	211,506
Other receivables	18,362	20,511
Inventories	196,720	190,253
Prepaid royalties	10,022	11,118
Deferred income taxes		52,728
Coal derivative assets	8,035	13,257
Other current assets	104,723	54,515
Total current assets	1,203,782	1,542,751
Property, plant and equipment		
Coal lands and mineral rights	3,713,639	6,040,656
Plant and equipment	2,359,674	2,935,381
Deferred mine development	553,286	891,649
	6,626,599	9,867,686
Less accumulated depreciation, depletion and amortization	(3,007,570)	(3,414,228)
Property, plant and equipment, net	3,619,029	6,453,458
Other assets		
Prepaid royalties	23,671	66,806
Equity investments	201,877	235,842
Other noncurrent assets	58,379	130,866
Total other assets	283,927	433,514
Total assets	$ 5,106,738	$ 8,429,723
Liabilities and Stockholders Equity (Deficit)		
Current liabilities		
Accounts payable	$ 128,131	$ 180,113
Accrued expenses and other current liabilities	329,450	302,396
Current maturities of debt	5,107,210	36,885
Total current liabilities	5,564,791	519,394
Long-term debt	30,953	5,123,485
Asset retirement obligations	396,659	398,896
Accrued pension benefits	27,373	16,260
Accrued postretirement benefits other than pension	99,810	32,668
Accrued workers compensation	112,270	94,291
Deferred income taxes		422,809
Other noncurrent liabilities	119,171	153,766
Total liabilities	6,351,027	6,761,569
Stockholders equity (deficit)		
Common stock, $0.01 par value, authorized 26,000 shares, issued 21,446 and 21,379 shares at December 31, 2015 and 2014, respectively	2,145	2,141
Paid-in capital	3,054,211	3,048,460

Treasury stock, at cost		(53,863)		(53,863)
Accumulated deficit		(4,244,967)		(1,331,825)
Accumulated other comprehensive income		(1,815)		3,241
Total stockholders equity (deficit)		(1,244,289)		1,668,154
Total liabilities and stockholders equity (deficit)	$	5,106,738	$	8,429,723

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

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Arch Coal, Inc. and Subsidiaries

Consolidated Statements of Cash Flows

(in thousands)

	Year Ended December 31, 2015	2014	2013
Operating activities			
Net loss	$ (2,913,142)	$ (558,353)	$ (641,832)
Adjustments to reconcile net loss to cash provided by operating activities:			
Depreciation, depletion and amortization	379,345	418,748	447,704
Amortization of acquired sales contracts, net	(8,811)	(13,187)	(9,457)
Prepaid royalties expensed	8,109	9,698	13,706
Deferred income taxes	(367,210)	25,152	(263,099)
Employee stock-based compensation expense	5,760	9,847	11,790
Gains on disposals and divestitures	(2,270)	(27,512)	(120,321)
Asset impairment and noncash mine closure costs	2,613,345	16,868	220,879
Goodwill impairment			265,423
Losses from disposed operations resulting from Patriot Coal bankruptcy	116,343		
Amortization relating to financing activities	25,241	17,363	24,789
Net loss resulting from early retirement of debt and debt restructuring	27,910		42,921
Changes in:			
Receivables	98,212	(8,991)	62,881
Inventories	(6,534)	41,548	44,635
Coal derivative assets and liabilities	973	5,449	3,606
Accounts payable, accrued expenses and other current liabilities	(15,532)	41,680	(78,126)
Asset retirement obligations	16,640	18,288	17,432
Pension, postretirement and other postemployment benefits	4,800	(25,347)	7,284
Other	(27,546)	(4,833)	5,527
Cash provided by (used in) operating activities	(44,367)	(33,582)	55,742
Investing activities			
Capital expenditures	(119,024)	(147,286)	(296,984)
Minimum royalty payments	(5,871)	(7,317)	(14,947)
Proceeds from sale-leaseback transactions			34,919
Proceeds from disposals and divestitures	2,191	62,358	433,453
Purchases of short term investments	(246,735)	(211,929)	(213,726)
Proceeds from sales of short term investments	290,205	205,611	194,537
Proceeds from sale of investments in equity investments and securities	2,259	9,464	
Investments in and advances to affiliates, net	(11,502)	(16,657)	(15,260)
Withdrawals (deposits) of restricted cash	(91,864)	(5,678)	3,453
Cash provided by (used in) investing activities	(180,341)	(111,434)	125,445
Financing activities			
Proceeds from term loan			294,000
Proceeds from issuance of senior notes			350,000
Payments to retire debt		(300)	(628,660)
Payments on term loan	(19,500)	(19,500)	(17,250)
Net payments on other debt	(11,332)	(5,395)	(6,836)
Debt financing costs		(4,519)	(20,489)
Dividends paid		(2,123)	(25,475)

Expenses related to debt restructuring		(27,910)				
Other				(15)		
Cash used in financing activities		(58,742)		(31,852)		(54,710)
Increase (decrease) in cash and cash equivalents		(283,450)		(176,868)		126,477
Cash and cash equivalents, beginning of period		734,231		911,099		784,622
Cash and cash equivalents, end of period	$	450,781	$	734,231	$	911,099
SUPPLEMENTAL CASH FLOW INFORMATION						
Cash paid during the year for interest	$	283,337	$	361,727	$	380,389
Cash refunded during the year for income taxes, net	$	4,138	$	4,896	$	18,741

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

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Arch Coal, Inc. and Subsidiaries

Consolidated Statements of Stockholders Equity (Deficit)

Three Years Ended December 31, 2015

	Common Stock	Paid-In Capital	Treasury Stock, at Cost	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total
			(In thousands, except per share data)			
BALANCE AT JANUARY 1, 2013	$ 2,141	$ 3,026,823	$ (53,848)	$ (104,042)	$ (16,507)	$ 2,854,567
Total comprehensive (loss)				(641,832)	54,199	(587,633)
Dividends on common shares ($1.20 per share)				(25,475)		(25,475)
Issuance of 39 shares of common stock under the stock incentive plan restricted stock and restricted stock units, net of forfeitures	0	0				
Employee stock-based compensation expense		11,790				11,790
BALANCE AT DECEMBER 31, 2013	2,141	3,038,613	(53,848)	(771,349)	37,692	2,253,249
Total comprehensive income (loss)				(558,353)	(34,451)	(592,804)
Dividends on common shares ($0.10 per share)				(2,123)		(2,123)
Treasury shares purchased	0	0	(15)			(15)
Employee stock-based compensation expense		9,847				9,847
BALANCE AT DECEMBER 31, 2014	2,141	3,048,460	(53,863)	(1,331,825)	3,241	1,668,154
Total comprehensive income (loss)				(2,913,142)	(5,056)	(2,918,198)
Issuance of 64 shares of common stock under the stock incentive plan-restricted stock and restricted stock units, net of forfeitures	4	(9)				(5)
Employee stock-based compensation expense		5,760				5,760
BALANCE AT DECEMBER 31, 2015	$ 2,145	$ 3,054,211	$ (53,863)	$ (4,244,967)	$ (1,815)	$ (1,244,289)

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Arch Coal, Inc. and Subsidiaries

Notes to Consolidated Financial Statements

1. Basis of Presentation

The accompanying consolidated financial statements include the accounts of Arch Coal, Inc. and its subsidiaries and controlled entities (the Company). The Company s primary business is the production of thermal and metallurgical coal from surface and underground mines located throughout the United States, for sale to utility, industrial and steel producers both in the United States and around the world. The Company currently operates mining complexes in West Virginia, Kentucky, Maryland, Virginia, Illinois, Wyoming and Colorado. All subsidiaries are wholly-owned. Intercompany transactions and accounts have been eliminated in consolidation.

Filing Under Chapter 11 of the United States Bankruptcy Code

On January 11, 2016 (the Petition Date), Arch and substantially all of its wholly owned domestic subsidiaries (the Filing Subsidiaries and, together with Arch, the Debtors) filed voluntary petitions for reorganization (collectively, the Bankruptcy Petitions) under Chapter 11 of Title 11 of the U.S. Code (the Bankruptcy Code) in the United States Bankruptcy Court for the Eastern District of Missouri (the Court). The Debtor s Chapter 11 Cases (collectively, the Chapter 11 Cases) are being jointly administered under the caption *In re Arch Coal, Inc., et al.* Case No. 16-40120 (lead case). Each Debtor will continue to operate its business as a debtor in possession under the jurisdiction of the Court and in accordance with the applicable provisions of the Bankruptcy Code and the orders of the Court.

The filing of the Bankruptcy Petitions constituted an event of default that accelerated Arch s obligations under the documents governing each of Arch s 7.00% senior notes due 2019, 9.875% senior notes due 2019, 8.00% senior secured second lien notes due 2019, 7.25% senior notes due 2020, 7.25% senior notes due 2021 (together, the senior notes) and senior secured first lien term loan due 2018 (the Existing Credit Agreement) (collectively with the senior notes, the Debt Instruments), all as further described in Note 14, Debt and Financing Arrangements to the Consolidated Financial Statements included in the Form 10-K. Immediately after filing the Bankruptcy Petitions, Arch began notifying all known current or potential creditors of the Debtors of the bankruptcy filings.

Additionally, on the Petition Date, the New York Stock Exchange (the NYSE) determined that the Company s stock was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards and trading in the Company s common stock was suspended on January 11, 2016. We expect that the existing common stock of the Company will be extinguished upon the Company s emergence from Chapter 11 and existing equity holders will not receive consideration in respect of their equity interests.

On the Petition Date, the Debtors filed a number of motions with the Court generally designed to stabilize their operations and facilitate the Debtors transition into Chapter 11. Certain of these motions sought authority from the Court for the Debtors to make payments upon, or otherwise honor, certain pre-petition obligations (e.g., obligations related to certain employee wages, salaries and benefits and certain vendors and other providers essential to the Debtors businesses). The Court has entered orders approving the relief sought in these motions.

Pursuant to Section 362 of the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property. Subject to certain exceptions under the Bankruptcy Code, the filing of the Debtors Chapter 11 Cases also automatically stayed the continuation of most legal proceedings, including the third party litigation matters described under Legal Proceedings, or the filing of other actions against or on behalf of the Debtors or their property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of the Debtors bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim. Notwithstanding the general application of the automatic stay described above, governmental authorities may determine to continue actions brought under their police and regulatory powers.

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As required by the Bankruptcy Code, the U.S. Trustee for the Eastern District of Missouri appointed an official committee of unsecured creditors (the Creditors Committee) on January 25, 2016. The Creditors Committee represents all unsecured creditors of the Debtors and has a right to be heard on all matters that come before the Court.

As a result of extremely challenging current market conditions, the Company believes it will require a significant restructuring of its balance sheet in order to continue as a going concern in the long term. The Company s ability to continue as a going concern is dependent upon, among other things, improvement in current market conditions, its ability to become profitable and maintain profitability and its ability to successfully implement its Chapter 11 plan strategy. As a result of the Bankruptcy Petitions, the realization of the Debtors assets and the satisfaction of liabilities are subject to significant uncertainty. While operating as a debtor-in-possession pursuant to the Bankruptcy Code, the Company may sell or otherwise dispose of or liquidate assets or settle liabilities, subject to the approval of the Court or as otherwise permitted in the ordinary course of business for amounts other than those reflected in the accompanying consolidated financial statements. Further, a Chapter 11 plan is likely to materially change the amounts and classifications of assets and liabilities reported in the Company s Consolidated Financial Statements.

On August 4, 2015, the Company effected a 1-for-10 reverse stock split of its common stock. Each stockholder s percentage ownership and proportional voting power remain unchanged as a result of the reverse stock split. All applicable share data, per share amounts and related information in the Consolidated Financial Statements and notes thereto have been adjusted retroactively to give effect to the 1-for-10 reverse stock split.

The Company completed the sale of Canyon Fuel Company, LLC (Canyon Fuel) on August 16, 2013. The results of these mining complexes have been segregated from continuing operations and are reflected, net of tax, as discontinued operations in the consolidated statements of operations for 2013. See further discussion in Note 3, Divestitures .

In response to weak coal markets, the Company has idled or closed mines in the Appalachia region and sold other non-core operating subsidiaries and assets. The results from these operations and gains or losses on the disposal are reflected in income from continuing operations in the consolidated statements of operations. See further discussion in Note 5, Impairment Charges and Mine Closure Costs .

2. Accounting Policies

The accompanying consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States for financial reporting and U.S. Securities and Exchange Commission regulations.

Accounting Pronouncements

There are no accounting pronouncements whose adoption had, or is expected to have, a material impact on the Company s consolidated financial statements.

Accounting Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and revenues and expenses in the accompanying consolidated financial statements and the disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents are stated at cost. Cash equivalents consist of highly-liquid investments with an original maturity of three months or less when purchased.

Restricted cash

Restricted cash represents cash collateral supporting letters of credit issued under the Company s accounts receivable securitization program.

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Accounts Receivable

Accounts receivable are recorded at amounts that are expected to be collected, based on past collection history, the economic environment and specified risks identified in the receivables portfolio.

Inventories

Coal and supplies inventories are valued at the lower of average cost or market. Coal inventory costs include labor, supplies, equipment costs, transportation costs incurred prior to the transfer of title to customers and operating overhead. The costs of removing overburden, called stripping costs, incurred during the production phase of the mine are considered variable production costs and are included in the cost of the coal extracted during the period the stripping costs are incurred.

Investments and Membership Interests in Joint Ventures

Investments and membership interests in joint ventures are accounted for under the equity method of accounting if the Company has the ability to exercise significant influence, but not control, over the entity. The Company s share of the entity s income or loss is reflected in Other operating expense (income), net in the consolidated statements of operations. Information about investment activity is provided in Note 10, Equity Method Investments and Membership Interests in Joint Ventures .

Investments in debt securities and marketable equity securities that do not qualify for equity method accounting are classified as available-for-sale and are recorded at their fair values. Unrealized gains and losses on these investments are recorded in other comprehensive income or loss. A decline in the value of an investment that is considered other-than-temporary would be recognized in operating expenses.

Acquired Sales Contracts

Coal supply agreements (sales contracts) acquired in a business combination are capitalized at their fair value and amortized over the tons of coal shipped during the term of the contract. The fair value of a sales contract is determined by discounting the cash flows attributable to the difference between the contract price and the prevailing forward prices for the tons under contract at the date of acquisition. See Note 11, Acquired Sales Contracts for further information related to the Company s acquired sales contracts.

Exploration Costs

Costs to acquire permits for exploration activities are capitalized. Drilling and other costs related to locating coal deposits and evaluating the economic viability of such deposits are expensed as incurred.

Prepaid Royalties

Leased mineral rights are often acquired through royalty payments. When royalty payments represent prepayments recoupable against royalties owed on future revenues from the underlying coal, they are recorded as a prepaid asset, with amounts expected to be recouped within one year classified as current. When coal from these leases is sold, the royalties owed are recouped against the prepayment and charged to cost of sales. An impairment charge is recognized for prepaid royalties that are not expected to be recouped.

Property, Plant and Equipment

Plant and Equipment

Plant and equipment are recorded at cost. Interest costs incurred during the construction period for major asset additions are capitalized. We did not capitalize any interest costs during the years ended December 31, 2015 and 2014 respectively. Expenditures that extend the useful lives of existing plant and equipment or increase the productivity of the asset are capitalized. The cost of maintenance and repairs that do not extend the useful life or increase the productivity of the asset is expensed as incurred.

Preparation plants and loadouts are depreciated using the units-of-production method over the estimated recoverable reserves, subject to a minimum level of depreciation. Other plant and equipment are depreciated principally using the straight-line method over the estimated useful lives of the assets, limited by the remaining life of the mine. The useful lives of mining equipment, including longwalls, draglines and shovels, range from 5 to 32 years. The useful lives of buildings and leasehold improvements generally range from 10 to 30 years.

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Deferred Mine Development

Costs of developing new mines or significantly expanding the capacity of existing mines are capitalized and amortized using the units-of-production method over the estimated recoverable reserves that are associated with the property being benefited. Costs may include construction permits and licenses; mine design; construction of access roads, shafts, slopes and main entries; and removing overburden to access reserves in a new pit. Additionally, deferred mine development includes the asset cost associated with asset retirement obligations.

Coal Lands and Mineral Rights

Rights to coal reserves may be acquired directly through governmental or private entities. A significant portion of the Company s coal reserves are controlled through leasing arrangements. Lease agreements are generally long-term in nature (original terms range from 10 to 50 years), and substantially all of the leases contain provisions that allow for automatic extension of the lease term providing certain requirements are met.

The net book value of the Company s coal interests was $2.4 billion and $4.7 billion at December 31, 2015 and 2014, respectively. Payments to acquire royalty lease agreements and lease bonus payments are capitalized as a cost of the underlying mineral reserves and depleted over the life of proven and probable reserves. Coal lease rights are depleted using the units-of-production method, and the rights are assumed to have no residual value.

Future lease bonus payments total $60.0 million in 2016.

Depreciation, depletion and amortization.

The depreciation, depletion and amortization related to long-lived assets is reflected in the statement of operations as a separate line item. No depreciation, depletion or amortization is included in any other operating cost categories.

Impairment

If facts and circumstances suggest that the carrying value of a long-lived asset or asset group may not be recoverable, the asset or asset group is reviewed for potential impairment. If this review indicates that the carrying amount of the asset will not be recoverable through projected undiscounted cash flows generated by the asset and its related asset group over its remaining life, then an impairment loss is recognized by reducing the carrying value of the asset to its fair value. The Company may, under certain circumstances, idle mining operations in response to market conditions or other factors. Because an idling is not a permanent closure, it is not considered an automatic indicator of impairment. See additional discussion in Note 5, Impairment Charges and Mine Closure Costs.

Goodwill

In a business combination, goodwill represents the excess of the purchase price over the fair value assigned to the net tangible and identifiable intangible assets acquired. The Company tests goodwill for impairment annually as of the beginning of the fourth quarter, or when circumstances indicate a possible impairment may exist. If the results of the testing indicate that the carrying amount of a reporting unit exceeds the fair value of the reporting unit, the fair value of goodwill must be calculated. An impairment loss generally would be recognized when the carrying amount of goodwill exceeds the implied fair value of goodwill, determined by subtracting the fair value of the other assets and liabilities associated with the reporting unit from the total fair value of the reporting unit. The fair value of a reporting unit is determined using a discounted cash flow (DCF) technique. A number of significant assumptions and estimates are involved in the application of the DCF analysis to forecast operating cash flows, including the discount rate, projections of production volumes, quality and costs to produce; projections of sales volumes by market (e.g., thermal versus metallurgical); and projections of market prices. See additional discussion in Note 6, Goodwill.

Deferred Financing Costs

The Company capitalizes costs incurred in connection with new borrowings, the establishment or enhancement of credit facilities and the issuance of debt securities. These costs are amortized as an adjustment to interest expense over the life of the borrowing or term of the credit facility using the interest method. The unamortized balance of deferred financing costs was

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$66.3 million and $89.1 million at December 31, 2015 and 2014, respectively. Amounts classified as current were $65.6 million and $25.5 million at December 31, 2015 and 2014, respectively. Current amounts are recorded in Other current assets and noncurrent amounts are recorded in Other noncurrent assets in the accompanying consolidated balance sheets.

Revenue Recognition

Revenues include sales to customers of coal produced at Company operations and coal purchased from third parties. The Company recognizes revenue at the time risk of loss passes to the customer at contracted amounts. Transportation costs are included in cost of sales and amounts billed by the Company to its customers for transportation are included in revenues.

Other Operating Expense (Income), net

Other operating expense (income), net in the accompanying consolidated statements of operations reflects income and expense from sources other than physical coal sales, including: bookouts, or the practice of offsetting purchase and sale contracts for shipping convenience purposes; contract settlements; liquidated damage charges related to unused terminal and port capacity; royalties earned from properties leased to third parties; income from equity investments (Note 10); gains and losses from divestitures and dispositions of assets (Note 3); and realized gains and losses on derivatives that do not qualify for hedge accounting and are not held for trading purposes (Note 12).

Asset Retirement Obligations

The Company s legal obligations associated with the retirement of long-lived assets are recognized at fair value at the time the obligations are incurred. Accretion expense is recognized through the expected settlement date of the obligation. Obligations are incurred at the time development of a mine commences for underground and surface mines or construction begins for support facilities, refuse areas and slurry ponds. The obligation s fair value is determined using a discounted cash flow technique and is based upon permit requirements and various estimates and assumptions that would be used by market participants, including estimates of disturbed acreage, reclamation costs and assumptions regarding equipment productivity. Upon initial recognition of a liability, a corresponding amount is capitalized as part of the carrying value of the related long-lived asset.

The Company reviews its asset retirement obligation at least annually and makes necessary adjustments for permit changes as granted by state authorities and for revisions of estimates of the amount and timing of costs. For ongoing operations, adjustments to the liability result in an adjustment to the corresponding asset. For idle operations, adjustments to the liability are recognized as income or expense in the period the adjustment is recorded. Any difference between the recorded obligation and the actual cost of reclamation is recorded in profit or loss in the period the obligation is settled. See additional discussion in Note 16, Asset Retirement Obligations.

Loss Contingencies

The Company accrues for cost related to contingencies when a loss is probable and the amount is reasonably determinable. Disclosure of contingencies is included in the financial statements when it is at least reasonably possible that a material loss or an additional material loss in excess of amounts already accrued may be incurred. The amount accrued represents the Company s best estimate of the loss, or, if no best estimate within a range of outcomes exists, the minimum amount in the range.

Derivative Instruments

The Company generally utilizes derivative instruments to manage exposures to commodity prices. Additionally, the Company may hold certain coal derivative instruments for trading purposes. Derivative financial instruments are recognized in the balance sheet at fair value. Certain coal contracts may meet the definition of a derivative instrument, but because they provide for the physical purchase or sale of coal in quantities expected to be used or sold by the Company over a reasonable period in the normal course of business, they are not recognized on the balance sheet.

Certain derivative instruments are designated as the hedge instrument in a hedging relationship. In a fair value hedge, the Company hedges the risk of changes in the fair value of a firm commitment, typically a fixed-price coal sales contract. Changes in both the hedged firm commitment and the fair value of a derivative used as a hedge instrument in a fair value hedge are recorded in earnings. In a cash flow hedge, the Company hedges the risk of changes in future cash flows related to a forecasted purchase or sale. Changes in the fair value of the derivative instrument used as a hedge instrument in a cash flow hedge are

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recorded in other comprehensive income or loss. Amounts in other comprehensive income or loss are reclassified to earnings when the hedged transaction affects earnings and are classified in a manner consistent with the transaction being hedged. The Company formally documents the relationships between hedging instruments and the respective hedged items, as well as its risk management objectives for hedge transactions.

The Company evaluates the effectiveness of its hedging relationships both at the hedge s inception and on an ongoing basis. Any ineffective portion of the change in fair value of a derivative instrument used as a hedge instrument in a fair value or cash flow hedge is recognized immediately in earnings. The ineffective portion is based on the extent to which exact offset is not achieved between the change in fair value of the hedge instrument and the cumulative change in expected future cash flows on the hedged transaction from inception of the hedge in a cash flow hedge or the change in the fair value. Ineffectiveness was insignificant for the years ended December 31, 2015, 2014 and 2013.

See Note 12, Derivatives for further disclosures related to the Company s derivative instruments.

Fair Value

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly hypothetical transaction between market participants at a given measurement date. Valuation techniques used must maximize the use of observable inputs and minimize the use of unobservable inputs. See Note 17, Fair Value Measurements for further disclosures related to the Company s recurring fair value estimates.

Income Taxes

Deferred income taxes are provided for temporary differences arising from differences between the financial statement and tax basis of assets and liabilities existing at each balance sheet date using enacted tax rates anticipated to be in effect when the related taxes are expected to be paid or recovered. A valuation allowance is established if it is more likely than not that a deferred tax asset will not be realized. Management reassesses the ability to realize its deferred tax assets annually in the fourth quarter or when circumstances indicate that the ability to realize deferred tax assets has changed. In determining the need for a valuation allowance, the Company considers projected realization of tax benefits based on expected levels of future taxable income, available tax planning strategies and the reversal of temporary differences.

Benefits from tax positions that are uncertain are not recognized unless the Company concludes that it is more likely than not that the position would be sustained in a dispute with taxing authorities, should the dispute be taken to the court of last resort. The Company would measure any such benefit at the largest amount of benefit that is greater than 50 percent likely of being realized upon settlement with taxing authorities.

See Note 15, Taxes for further disclosures about income taxes.

Benefit Plans

The Company has non-contributory defined benefit pension plans covering most of its salaried and hourly employees. On January 1, 2015 the Company s cash balance and excess pension plans were amended to freeze new service credits for any new or active employee. The Company also currently provides certain postretirement medical and life insurance coverage for eligible employees. The cost of providing these benefits are determined on an actuarial basis and accrued over the employee s period of active service.

The Company recognizes the overfunded or underfunded status of these plans as determined on an actuarial basis on the balance sheet and the changes in the funded status are recognized in other comprehensive income. See Note 21, Employee Benefit Plans for additional disclosures relating to these obligations.

Stock-Based Compensation

The compensation cost of all stock-based awards is determined based on the grant-date fair value of the award, and is recognized over the requisite service period. The grant-date fair value of option awards is determined using a Black-Scholes option pricing model. Compensation cost for an award with performance conditions is accrued if it is probable that the conditions will be met. See further discussion in Note 19, Stock-Based Compensation and Other Incentive Plans.

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Accounting Standards Issued

In May 2014, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers. ASU 2014-09 is a comprehensive revenue recognition standard that will supersede nearly all existing revenue recognition guidance under current U.S. GAAP and replace it with a principle based approach for determining revenue recognition. ASU 2014-09 will require that companies recognize revenue based on the value of transferred goods or services as they occur in the contract. The ASU also will require additional disclosure about the nature, amount, timing and uncertainty of revenue and cash flows arising from customer contracts, including significant judgments and changes in judgments and assets recognized from costs incurred to obtain or fulfill a contract. ASU 2014-09 is effective for interim and annual periods beginning after December 15, 2017. Early adoption is permitted only in annual reporting periods beginning after December 15, 2016, including interim periods therein. Entities will be able to transition to the standard either retrospectively or as a cumulative-effect adjustment as of the date of adoption. The Company is in the process of evaluating the impact of ASU 2014-09 on the Company s financial statements and disclosures.

In August 2014, the FASB issued ASU 2014-15, Presentation of Financial Statements-Going Concern (Subtopic 205-40): Disclosure of Uncertainties About an Entity s Ability To Continue as a Going Concern. ASU 2014-15 is intended to define management s responsibility to evaluate whether there is substantial doubt about an organization s ability to continue as a going concern and to provide related footnote disclosures. The update provides guidance to an organization s management, with principles and definitions that are intended to reduce diversity in the timing and content of disclosures that are commonly provided by organizations today in the financial statement footnotes. The amendments are effective for the Company s fiscal year and interim periods within those years beginning after November 1, 2017. Early application is permitted. The Company is in the process of evaluating the impact of ASU 2014-15 on the Company s financial statements and disclosures.

In April 2015, the Financial Accounting Standards Board (FASB) issued the Accounting Standards Update No. 2015-03 (ASU 2015-03), Simplifying the Presentation of Debt Issuance Costs. ASU 2015-03 requires debt issuance costs related to recognized debt liability to be presented in the balance sheet as a direct deduction from the carrying amount of the liability, consistent with debt discounts. Amendments in the update are effective retrospectively for fiscal years and interim periods within those years, beginning after December 15, 2015, with early adoption permitted. Upon adoption of this guidance, the current financial statement classification of debt issuance costs will change from total assets to long-term debt on our Consolidated Balance Sheets.

In August 2015, the FASB issued ASU 2015-15, *Interest - Imputation of Interest (Subtopic 835-30) - Presentation and Subsequent Measurement of Debt Issuance Costs Associated with Line-of-Credit Arrangements* . On April 7, 2015, the FASB issued ASU 2015-03, Interest-Imputation of Interest (Subtopic 835-30): Simplifying the Presentation of Debt Issuance Costs, which requires entities to present debt issuance costs related to a recognized debt liability as a direct deduction from the carrying amount of that debt liability. Given the absence of authoritative guidance within ASU 2015-03 for debt issuance costs related to line-of-credit arrangements, the SEC staff stated that they would not object to an entity deferring and presenting debt issuance costs as an asset and subsequently amortizing the deferred debt issuance costs ratably over the term of the line-of-credit arrangement, regardless of whether there are any outstanding borrowings on the line-of-credit arrangement. ASU 2015-15 adds these SEC comments to the S section of the Codification. The adoption of this standard is not expected to have a material impact on the Company s consolidated financial statements.

In May 2015, the FASB issued ASU No. 2015-07 *Fair Value Measurement (Topic 820), Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or its Equivalent)* . This ASU eliminates the requirement to categorize within the fair value hierarchy investments who fair values are measured at net asset value (NAV) using the practical expedient in ASC 820. Instead entities will have to disclose the fair values of such investments so that financial statement users can reconcile amounts reported in the fair value hierarchy table to the amounts reported in the balance sheet. ASU 2015-07 is effective for public business entities in fiscal years beginning after 15

December 2015 and interim periods within those years. Early adoption is permitted and guidance will be applied retrospectively. The Company is currently evaluating the impact the adoption of ASU 2015-07 on the Company s financial statements and disclosures.

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In July 2015, the FASB issued Accounting Standards Update 2015-11, Simplifying the Measurement of Inventory, which requires that inventory within the scope of ASU 2015-11 be measured at the lower of cost and net realizable value. Inventory measured using last-in, first-out (LIFO) and the retail inventory method are not impacted by the new guidance. ASU 2015-11 applies to all other inventory, which includes inventory that is measured using first-in, first-out (FIFO) or average cost. An entity should measure inventory within the scope of ASU 2015-11 at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. ASU 2015-11 is effective for public business entities in fiscal years, and interim periods within those years, beginning after December 15, 2016. Early adoption is permitted. The Company is currently evaluating the impact the adoption of ASU 2015-11 on the Company s financial statements and disclosures.

On November 20, 2015, the Financial Accounting Standards Board (FASB) issued ASU No. 2015-17, Balance Sheet Classification of Deferred Taxes, requiring all deferred tax assets and liabilities, and any related valuation allowance, to be classified as noncurrent on the balance sheet. The classification change for all deferred taxes as noncurrent simplifies entities processes as it eliminates the need to separately identify the net current and net noncurrent deferred tax asset or liability in each jurisdiction and allocate valuation allowances. The Company is in the process of evaluating the impact of ASU 2015-07 on the Company s financial statements and disclosures.

3. Divestitures

During 2014, the Company entered into agreements to sell various non-core operations, including operating and idled thermal coal complexes in Kentucky and the Company s highwall manufacturing subsidiary. The Company received $46.7 million in cash and recognized a net pre-tax gain of $17.8 million from these divestitures, reflected in other operating expense (income), net in the Consolidated Statement of Operations.

As part of a strategy to divest non-core thermal coal assets, the Company entered into a definitive agreement on June 27, 2013 to sell Canyon Fuel, to Bowie Resources, LLC. Canyon Fuel operated two longwall mining complexes and a continuous miner operation in Utah. The sale was completed on August 16, 2013, for $422.7 million in cash, including adjustments to the purchase price to finalize working capital.

The following table summarizes the results of discontinued operations through the date of disposition:

		Year Ended December 31, 2013
Total Revenues	$	219,002
Income from discontinued operations before income taxes	$	32,167
Gain on sale		120,321
Less: income tax expense		49,092
Income from discontinued operations, including gain on sale - net of tax	$	103,396
Basic earnings per common share from discontinued operations	$	4.87
Diluted earnings per common share from discontinued operations	$	4.87

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4. Accumulated Other Comprehensive Income (Loss)

The following items are included in accumulated other comprehensive income (loss):

	Derivative Instruments	Pension, Postretirement and Other Post-Employment Benefits	Available-for-Sale Securities	Accumulated Other Comprehensive Income (Loss)
		(In thousands)		
Balance at January 1, 2014	$ 565	$ 31,112	$ 6,015	$ 37,692
Unrealized gains	3,677	(22,516)	(5,727)	(24,566)
Amounts reclassified from accumulated other comprehensive income (loss)	(1,692)	(5,736)	(2,457)	(9,885)
Balance at December 31, 2014	2,550	2,860	(2,169)	3,241
Unrealized gains (losses)	3,903	(8,723)	(3,333)	(8,153)
Amounts reclassified from accumulated other comprehensive income (loss)	(6,128)	5,142	4,083	3,097
Balance at December 31, 2015	$ 325	$ (721)	$ (1,419)	$ (1,815)

The following amounts were reclassified out of accumulated other comprehensive income (loss) during the years ended December 31, 2015 and 2014, respectively:

Details about accumulated other comprehensive income components	Reclassifications 2015	2014	Line Item in the Consolidated Statement of Operations
	(in thousands)		
Derivative instruments	$ 9,575	$ 2,643	Revenues
	(3,447)	(951)	Provision for (benefit from) income taxes
	$ 6,128	$ 1,692	Net of tax
Pension, postretirement and other post-employment benefits			
Amortization of prior service credits	$ 8,335(1)	$ 11,760	
Amortization of net actuarial gains (losses)	(16,369)(1)	(2,797)	
	(8,034)	8,963	Total before tax
	2,892	(3,227)	Provision for (benefit from) income taxes
	$ (5,142)	$ 5,736	Net of tax
Available-for-sale securities	$ (6,391)(2)	$ 3,838	Interest and investment income
	2,308	(1,381)	Provision for (benefit from) income taxes
	$ (4,083)	$ 2,457	Net of tax

(1) Production-related benefits and workers compensation costs are included in costs to produce coal.

(2) The gains and losses on sales of available-for-sale-securities are determined on a specific identification basis.

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5. Impairment Charges and Mine Closure Costs

The following table summarizes the amounts reflected on the line Asset impairment and mine closure costs in the consolidated statements of operations:

Description		2015		2014		2013
			Year Ended December 31, (In thousands)			
Coal lands and mineral rights	$	2,210,488	$		$	79,094
Plant and equipment		199,107		1,512		36,296
Deferred development		159,474				13,451
Prepaid royalties		41,990		15,356		1,104
Equity investments		21,325				28,947
Notes receivable						49,203
Inventories		66				12,765
Other		(4,147)		7,245		19
Total	$	2,628,303	$	24,113	$	220,879

2015 Impairment Charges

In 2015, as a result of the continued deterioration in thermal and metallurgical coal markets and projections for a muted pricing recovery, certain of the Company s mine complexes have incurred and are expected to continue to incur operating losses. The Company determined that the further weakening of the pricing environment in the last half of the year and the projected operating losses represent indicators of impairment with respect to certain of its long-lived assets or assets groups. Using current pricing expectations which reflect marketplace participant assumptions, life of mine cash flows were used to determine if the undiscounted cash flows exceed the current asset values for certain operating complexes in the Company s Appalachia segment. For multiple operating complexes, the undiscounted cash flows did not exceed the carrying value of the long-lived assets. Discounted cash flows were utilized to reduce the carrying value of those assets to fair value. The discount rate used reflects the current financial difficulties present in the commodities sector in general and coal mining specifically; the perceived risk of financing coal mining in light of industry defaults; and the lack of an active market for buying or selling coal mining assets. Additionally, the Company determined that the current market conditions represent an indicator of impairment for certain undeveloped coal properties that were acquired in times of significantly higher coal prices. Current prices and the significant capital outlay that would be required to develop these reserves indicate that the carrying value is not recoverable. As a result the Company recorded a $2.6 billion asset impairment charge in the last two quarters of 2015 of which $2.1 billion was recorded during the third quarter and the remaining $0.5 billion was recorded in the fourth quarter. Of the total charge. $2.2 billion was recorded to the Company s Appalachia segment, with the remaining $0.4 billion to the Company s Other operating segment. There is no fair value remaining related to the impaired assets.

During the second quarter of 2015, the Company recorded $19.1 million to Asset impairment and mine closure costs in the Consolidated Statements of Operations. An impairment charge of $12.2 million relates to the portion of an advance royalty balance on a reserve base mined at the Company s Mountain Laurel, Spruce and Briar Branch operations that will not be recouped based on latest estimates of sales volume and pricing through the March 2017 recoupment period. Additionally, the company recorded a $5.6 million impairment charge related to the closure of a higher-cost mining complex serving the metallurgical coal markets.

2014 Impairment Charges

During the Company s annual budgeting process for 2015 (performed in the fall of 2014), a review of forecasted revenues indicated that the remaining balance of advance royalty payments made on a reserve base supplying the Company s Mountain Laurel, Spruce Mine and Briar Branch operations would not be recoupable against future royalties payments. Under

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the lease, any unrecouped advance payment balance at March 31, 2017 will be forfeited by the Company. Based on estimates of sales volumes and pricing through the end of the recoupment period, an impairment charge was recorded during the fourth quarter of 2014 for $15.4 million of the remaining $48.0 million balance that would not be recouped.

In response to weak metallurgical coal markets the Company idled a higher-cost mining complex in the third quarter of 2014 in order to concentrate on metallurgical coal production from its lowest-cost and highest-margin operations. Closure charges of $5.1 million were recognized during the third quarter of 2014 relating to the idling.

2013 Impairment Charges

As a result of the weak thermal coal markets in Appalachia, the Company assessed in the third quarter of 2013 whether the carrying values of certain assets were recoverable through future cash flows. The Company determined that the carrying amounts of certain assets associated with the Hazard mining complex in Kentucky and the Company s ADDCAR subsidiary, which manufactures and sells its patented highwall mining system, could not be recovered through future cash flows expected to be generated from use of the assets and their ultimate disposal.

The assets fair values were determined based on projections of cash flows to be generated from use of the assets and their ultimate disposal including estimates relating to market demand, coal prices, production costs and mine plans, and recovery value of the assets. An impairment charge of $142.8 million was recognized to adjust the carrying value of the assets to their fair value of $71.3 million.

During 2013, the Company also recognized other-than-temporary impairment charges related to equity method investments. See further discussion in Note 10, Equity Method Investments and Membership Interests in Joint Ventures.

Due to the unobservable inputs within the modeling used to determine fair market value within the Company s asset impairment process, the fair value would be considered level 3 within the fair value hierarchy.

6. Goodwill

Changes in the carrying value of goodwill for the three years ended December 31, 2015 are as follows:

		(In thousands)
Balance at January 1, 2013	$	265,423
Impairment		(265,423)
Balance at December 31, 2013	$	

The Company performed its annual impairment testing as of October 1, 2013 on its two remaining Appalachia reporting units with goodwill balances, the Leer mining complex and an undeveloped property adjacent to it. The fair value of these two reporting units are sensitive to the volatility in the demand for and pricing of metallurgical coal, and continuing weakness in the metallurgical coal markets resulted in a reassessment of key marketing and operating assumptions during the Company s annual budgeting process. As a result, the book values of the reporting units exceeded their fair values after the first step of the goodwill impairment tests. It was also determined that the goodwill had no fair value, and the Company recognized an impairment loss for the remaining reporting units totaling $265.4 million.

7. Losses from disposed operations resulting from Patriot Coal bankruptcy

On December 31, 2005, Arch entered into a purchase and sale agreement with Magnum to sell certain operations. On July 23, 2008, Patriot acquired Magnum. On May 12, 2015, Patriot and certain of its wholly owned subsidiaries (Debtors), including Magnum, filed voluntary petitions for reorganization under Chapter 11 of the U.S. Code in the U.S. Bankruptcy

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Court for the Eastern District of Virginia. Subsequently, on October 28, 2015, Patriot s Plan of Reorganization was approved, including an authorization to reject their collective bargaining agreements and modify certain union-related retiree benefits. As a result of the Plan of Reorganization, the Company became statutorily responsible for retiree medical benefits pursuant to Section 9711 of the Coal Industry Retiree Health Benefit Act of 1992 for certain retirees of Magnum who retired prior to October 1, 1994. In addition, the Company has provided surety bonds to Patriot related to permits that were sold to an affiliate of Virginia Conservation Legacy Fund, Inc. (VCLF). Should VCLF not perform required reclamation, the Company would incur losses under the bonds and related indemnity agreements. The Company recognized $116.3 million in losses in 2015 related to the previously disposed operations as a result of the Patriot Coal bankruptcy. An original charge of $149.3 million was recorded in the third quarter of 2015 based on our best estimate at the time. This was subsequently reduced by $33.0 million in the fourth quarter due to revised census data and changes in underlying assumptions related to the retiree medical benefits.

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8. Inventories

Inventories consist of the following:

	December 31, 2015	December 31, 2014
	(In thousands)	
Coal	$ 85,043	$ 71,901
Repair parts and supplies	111,677	118,352
	$ 196,720	$ 190,253

The repair parts and supplies are stated net of an allowance for slow-moving and obsolete inventories of $6.0 million at December 31, 2015 and $6.6 million at December 31, 2014.

9. Investments in Available-for-Sale Securities

The Company has invested primarily in highly liquid investment-grade corporate bonds. These investments are held in the custody of a major financial institution. These securities, along with the Company s investments in marketable equity securities, are classified as available-for-sale securities and, accordingly, the unrealized gains and losses are recorded through other comprehensive income.

The Company s investments in available-for-sale marketable securities are as follows:

	December 31, 2015					
					Balance Sheet Classification	
	Cost Basis	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Short-Term Investments	Other Assets
	(In thousands)					
Available-for-sale:						
U.S. government and agency securities	$ 10,007	$	$ (12)	$ 9,995	$ 9,995	
Corporate notes and bonds	190,496		(299)	190,197	190,197	
Equity securities	3,938	668	(2,888)	1,718		1,718
Total Investments	$ 204,441	$ 668	$ (3,199)	$ 201,910	$ 200,192	$ 1,718

	December 31, 2014					
					Balance Sheet Classification	
		Gross	Gross			

	Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value	Short-Term Investments	Other Assets
			(In thousands)			
Available-for-sale:						
Corporate notes and bonds	$ 253,590	$	$ (4,636)	$ 248,954	$ 248,954	$
Equity securities	3,910	4,125	(2,890)	5,145		5,145
Total Investments	$ 257,500	$ 4,125	$ (7,526)	$ 254,099	$ 248,954	$ 5,145

The aggregate fair value of investments with unrealized losses that had been owned for less than a year was $184.6 million and $163.0 million at December 31, 2015 and 2014, respectively. The aggregate fair value of investments with unrealized losses that have been owned for over a year was $15.8 million and $86.1 million at December 31, 2015 and 2014, respectively.

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The debt securities outstanding at December 31, 2015 have maturity dates ranging from the first quarter of 2016 through the second quarter of 2017. The Company classifies its investments as current based on the nature of the investments and their availability to provide cash for use in current operations, if needed.

10. Equity Method Investments and Membership Interests in Joint Ventures

The Company accounts for its investments and membership interests in joint ventures under the equity method of accounting if the Company has the ability to exercise significant influence, but not control, over the entity. Equity method investments are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investments may not be recoverable. Certain of the Company s investments are in development stage companies whose success depends on factors including the receipt of permits and other regulatory environmental issues, the ability of the investee companies to raise additional funds in financial markets that can be volatile and other key business factors, any of which may impact the Company s ability to recover its investment.

Below are the equity method investments reflected in the consolidated balance sheets:

Investee	Knight Hawk	DTA	Millennium	Tongue River	DKRW	Tenaska	Other	Total
Balance at January 1, 2013	$ 149,063	$ 15,462	$ 32,214	$ 14,697	$ 15,515	$ 15,264	$	$ 242,215
Advances to (distributions from) affiliates, net	(13,536)	3,644	6,476	4,004			200	788
Equity in comprehensive income (loss)	17,279	(4,969)	(2,796)	(282)	(1,832)			7,400
Impairment of equity investment					(13,683)	(15,264)		(28,947)
Balance at December 31, 2013	152,806	14,137	35,894	18,419			200	221,456
Advances to (distributions from) affiliates, net	(12,603)	3,774	6,742	2,541			3,600	4,054
Equity in comprehensive income (loss)	18,274	(4,173)	(2,413)	(220)			(1,136)	10,332
Balance at December 31, 2014	158,477	13,738	40,223	20,740			2,664	235,842
Advances to (distributions from) affiliates, net	(29,862)	3,207	7,052	913			330	(18,360)
Equity in comprehensive income (loss)	22,977	(3,706)	(9,686)	(328)			(1,278)	7,979
Impairment of equity investment				(21,325)				(21,325)
Sale of equity investment							(2,259)	$ (2,259)
Balance at December 31, 2015	$ 151,592	$ 13,239	$ 37,589	$	$	$	$ (543)	$ 201,877

The Company holds a 49% equity interest in Knight Hawk Holdings, LLC (Knight Hawk), a coal producer in the Illinois Basin.

The Company holds a general partnership interest of 21.875% in Dominion Terminal Associates (DTA), which is accounted for under the equity method. DTA operates a ground storage-to-vessel coal transloading facility in Newport News, Virginia for use by the partners. Under the terms of a throughput and handling agreement with DTA, each partner is charged its share of cash operating and debt-service costs in exchange for the right to use the facility s loading capacity and is required to make periodic cash advances to DTA to fund such costs.

The Company holds a 38% ownership interest in Millennium Bulk Terminals-Longview, LLC (Millennium), the owner of a brownfield bulk commodity terminal on the Columbia River near Longview, Washington. Additional future purchase consideration is due upon the completion of certain project milestones. Millennium continues to work on obtaining the required approvals and necessary permits to complete dredging and other upgrades to ship coal, alumina and cementitious material from the terminal. The Company will control 38% of the terminal s throughput and storage capacity, in order to facilitate export shipments of coal off the west coast of the United States.

The Company holds a 35% membership interest in the Tongue River Holding Company, LLC (Tongue River) joint venture. Tongue River will develop and construct a railway line near Miles City, Montana and the Company s Otter Creek reserves. The Company has the right, upon the receipt of permits and approval for construction or under other prescribed circumstances, to require the other investors to purchase all of the Company s units in the venture at an amount equal to the capital contributions made by the Company at that time, less any distributions received. During the third quarter of 2015, the

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Company recorded an impairment charge of $21.3 million representing the entire value of the Company s investment in the project; the impairment charge is included on the line Asset impairment and mine closure costs.

The Company holds a 24% equity interest in DKRW Advanced Fuels LLC (DKRW), who had entered into an Engineering, Procurement and Construction Agreement with a Chinese company to construct and commission the Medicine Bow coal-to-liquids facility. However, as the project did not progress to the next stage of development, the Company recorded an other-than-temporary impairment charge of $57.7 million in the third quarter of 2013, representing the Company s equity investment of $13.7 million and an outstanding $44.0 million loan receivable balance. The impairment charges are included on the line Asset impairment and mine closure costs in the consolidated statement of operations.

During the second quarter of 2013, Tenaska Trailblazer Partners, LLC (Tenaska) announced that it was discontinuing its development plans for the Trailblazer Energy Center in Texas. As a result, the Company recorded a $20.5 million impairment charge, which consisted of its 35% equity investment of $15.3 million and a $5.2 million receivable balance related to advances for development work. The impairment charges are included on the line Asset impairment and mine closure costs in the consolidated statement of operations.

The Company may be required to make future contingent payments of up to $58.5 million related to development financing for certain of its equity investees. The Company s obligation to make these payments, as well as the timing of any payments required, is contingent upon the achievement of project development milestones.

11. Acquired Sales Contracts

The acquired sales contracts reflected in the consolidated balance sheets are as follows:

	December 31, 2015			December 31, 2014		
	Assets	**Liabilities**	**Net Total**	**Assets**	**Liabilities**	**Net Total**
Acquired fair value	$ 131,299	$ 166,697		$ 131,299	$ 166,697	
Accumulated amortization	(130,839)	(151,354)		(130,363)	(134,988)	
Total	$ 460	$ 15,343	$ (14,883)	$ 936	$ 31,709	$ (30,773)
Balance Sheet classification:						
Other current	$ 460	$ 3,852		$ 462	$ 12,453	
Other noncurrent	$	$ 11,491		$ 474	$ 19,256	

The Company anticipates amortization of acquired sales contracts, based upon expected shipments in the next five years, to be income of approximately $3.3 million in 2016, $3.7 million in 2017, $3.7 million in 2018, $3.7 million in 2019 and $0.3 million in 2020.

12. Derivatives

Diesel fuel price risk management

The Company is exposed to price risk with respect to diesel fuel purchased for use in its operations. The Company anticipates purchasing approximately 50 to 58 million gallons of diesel fuel for use in its operations during 2016. To protect the Company s cash flows from increases in the price of diesel fuel for its operations, the Company may use forward physical diesel purchase contracts and purchase out-of-the-money heating oil call options to protect against substantial increases in pricing. At December 31, 2015, the Company had heating oil call options for approximately 56 million gallons at an average strike price of $1.98.

Coal risk management positions

The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market in order to manage its exposure to coal prices. The Company has exposure to the risk of fluctuating coal prices related to forecasted sales

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or purchases of coal or to the risk of changes in the fair value of a fixed price physical sales contract. Certain derivative contracts may be designated as hedges of these risks.

At December 31, 2015, the Company held derivatives for risk management purposes that are expected to settle in the following years:

(Tons in thousands)	2016	2017	Total
Coal sales	480		480
Coal purchases	255		255

Coal trading positions

The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market for trading purposes. The Company is exposed to the risk of changes in coal prices on the value of its coal trading portfolio. The unrecognized gains of $5.8 million in the trading portfolio are expected to be realized in 2016.

Tabular derivatives disclosures

The Company has master netting agreements with all of its counterparties which allow for the settlement of contracts in an asset position with contracts in a liability position in the event of default or termination. Such netting arrangements reduce the Company s credit exposure related to these counterparties. For classification purposes, the Company records the net fair value of all the positions with a given counterparty as a net asset or liability in the consolidated balance sheets. The amounts shown in the table below represent the fair value position of individual contracts, and not the net position presented in the accompanying consolidated balance sheets.

The fair value and location of derivatives reflected in the accompanying consolidated balance sheets are as follows:

Fair Value of Derivatives (In thousands)	December 31, 2015 Asset Derivative	December 31, 2015 Liability Derivative	December 31, 2014 Asset Derivative	December 31, 2014 Liability Derivative
Derivatives Designated as Hedging Instruments				
Coal	$ 4	$ (20)	$ 6,535	$ (2,492)
Derivatives Not Designated as Hedging Instruments				
Heating oil diesel purchases	1,017		300	
Coal held for trading purposes, exchange traded swaps and futures	110,653	(104,814)	96,898	(93,272)
Coal risk management	3,912	(1,947)	8,510	(3,688)

Natural gas	494	(247)				
Total	116,076	(107,008)		105,708	(96,960)	
Total derivatives	116,080	(107,028)		112,243	(99,452)	
Effect of counterparty netting	(107,028)	107,028		(98,686)	98,686	
Net derivatives as classified in the balance sheets	$ 9,052	$	$ 9,052	$ 13,557	$ (766)	$ 12,791

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		December 31, 2015	December 31, 2014
Net derivatives as reflected on the balance sheets			
Heating oil	Other current assets	$ 1,017	$ 300
Coal	Coal derivative assets	8,035	13,257
	Accrued expenses and other current liabilities		(766)
		$ 9,052	$ 12,791

The Company had a current asset for the right to reclaim cash collateral of $1.7 million and a current liability for the obligation to return cash collateral of $2.4 million at December 31, 2015 and 2014, respectively. These amounts are not included with the derivatives presented in the table above and are included in other current assets and other current liabilities , respectively, in the accompanying consolidated balance sheets.

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The effects of derivatives on measures of financial performance are as follows:

Derivatives used in Cash Flow Hedging Relationships (in thousands)

For the year ended December 31,

	Gain (Loss) Recognized in Other Comprehensive Income (Effective Portion)			Gains (Losses) Reclassified from Other Comprehensive Income into Income (Effective Portion)		
	2015	2014	2013	2015	2014	2013
Coal sales(1)	$ 12,816	$ 10,842	(338)	$ 18,635	$ 5,336	$ 3,664
Coal purchases(2)	(6,718)	(5,097)	526	(9,060)	(2,693)	(683)
	$ 6,098	$ 5,745	$ 188	$ 9,575	$ 2,643	$ 2,981

No ineffectiveness or amounts excluded from effectiveness testing relating to the Company s cash flow hedging relationships were recognized in the results of operations in the years ended December 31, 2015, 2014 and 2013.

Derivatives Not Designated as Hedging Instruments (in thousands)

For the year ended December 31,

	Gain (Loss) Recognized		
	2015	2014	2013
Coal unrealized(3)	$ (3,883)	$ 430	$ (12,700)
Coal realized(4)	$ 3,236	$ 5,956	$ 32,534
Heating oil diesel purchases(4)	$ (8,294)	$ (7,848)	$ (9,791)
Heating oil fuel surcharges(4)	$	$ (405)	$ (947)
Natural gas	$ 878	$	$
Foreign currency	$ (887)	$	$

Location in statement of operations:

(1) Revenues

(2) Cost of sales

(3) Change in fair value of coal derivatives and coal trading activities, net

(4) Other operating income, net

The Company recognized net unrealized and realized gains of $5.7 million, $3.2 million, and $4.9 million during the years ended December 31, 2015, 2014 and 2013, respectively, related to its trading portfolio, which are included in the caption Change in fair value of coal derivatives and coal trading activities, net in the accompanying consolidated statements of operations, and are not included in the previous tables reflecting the effects of derivatives on measures of financial performance.

Based on fair values at December 31, 2015, losses on derivative contracts designated as hedge instruments in cash flow hedges expected to be reclassified from other comprehensive income into earnings during the next twelve months are immaterial.

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13. Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consist of the following:

	December 31, 2015	December 31, 2014
	(In thousands)	
Payroll and employee benefits	$ 58,423	$ 73,362
Taxes other than income taxes	104,755	114,598
Interest	119,785	30,384
Acquired sales contracts	3,852	12,453
Workers compensation	16,875	16,714
Asset retirement obligations	13,795	19,222
Other	11,965	35,663
	$ 329,450	$ 302,396

The increase in the accrued interest balance is due to the Company exercising the 30-day grace period under its indenture agreements with holders of its 9.875% Senior Notes due 2019, the 7.00% Senior Notes due 2019 and the 7.25% Senior Notes due 2021 on December 15, 2015. This extended the time period the Company had to make the approximately $90 million interest payment due December 15, 2015 without triggering an event of default under the indentures. Subsequently, on January 11, 2016 (the Petition Date), the Company and substantially all of its wholly owned domestic subsidiaries filed voluntary petitions for reorganization under Chapter 11 of Title 11 of the U.S. Code in the United States Bankruptcy Court for the Eastern District of Missouri. See additional details in Note 26, Subsequent Events.

14. Debt and Financing Arrangements

	December 31, 2015	December 31, 2014
	(In thousands)	
Term loan due 2018 ($1.9 billion and $1.93 billion face value, respectively)	$ 1,875,429	$ 1,890,846
7.00% senior notes due 2019 at par	1,000,000	1,000,000
8.00% senior secured notes due 2019 at par	350,000	350,000
9.875% senior notes ($375.0 million face value) due 2019	365,600	363,493
7.25% senior notes due 2020 at par	500,000	500,000
7.25% senior notes due 2021 at par	1,000,000	1,000,000
Other	47,134	56,031
	5,138,163	5,160,370
Less current maturities of debt	5,107,210	36,885
Long-term debt	$ 30,953	$ 5,123,485

Acceleration of Debt Obligations; Automatic Stay

The filing of the Bankruptcy Petitions constituted an event of default that accelerated the Company s obligations under the documents governing each of its 7.00% senior notes due 2019, 9.875% senior notes due 2019, 8.00% senior secured second lien notes due 2019, 7.25% senior notes due 2020, 7.25% senior notes due 2021 (together, the senior notes) and senior secured first lien term loan due 2018. Immediately after filing the Bankruptcy Petitions, the Company began notifying all known current or potential creditors of the Debtors of the bankruptcy filings.

Pursuant to Section 362 of the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property. Subject to certain exceptions under the Bankruptcy Code, the filing of the Debtors Chapter 11 Cases also automatically stayed the continuation of most legal proceedings, including the third party litigation matters described under

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Item 3, Legal Proceedings, or the filing of other actions against or on behalf of the Debtors or their property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of the Debtors bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim. Notwithstanding the general application of the automatic stay described above, governmental authorities may determine to continue actions brought under their police and regulatory powers

Credit Facilities

As of September 30, 2015, availability under the Company s revolver was subject to limits on secured debt in its senior note indentures. At September 30, 2015, the limit under the most restrictive indenture did not provide meaningful availability under the revolver and, as a result, on November 6, 2015 the Company delivered an irrevocable 5 day notice to the administrative agent to voluntarily terminate all commitments thereunder, which terminated on November 11, 2015. The Company had no borrowings outstanding under the revolving credit facility at September 30, 2015 and had not been using it as a source of liquidity in the recent past.

The Company is also party to an accounts receivable securitization program under which eligible trade receivables are sold, without recourse, to a multi-seller, asset-backed commercial paper conduit. The entity through which these receivables are sold is consolidated into the Company s financial statements. The Company may borrow and draw letters of credit against the facility, and pays facility fees, program fees and letter of credit fees (based on amounts of outstanding letters of credit). The total aggregate borrowings and letters of credit are limited by eligible accounts receivable, as defined under the terms of the credit facility agreement. The credit agreement expires on December 8, 2017.

At December 31, 2015, the Company had no available borrowing capacity under its lines of credit.

Term Loan

On May 16, 2012, the Company borrowed $1.4 billion under a secured term loan facility, issued at a 1% discount. The proceeds from the term loan were used to retire all outstanding borrowings under the revolving credit facility and the outstanding $450.0 million principal amount of 6.75% Senior Notes due 2013 issued by Arch Western Finance, LLC, the Company s indirect subsidiary. On November 21, 2012, the Company borrowed an incremental $250.0 million on the term loan facility at a 1% discount at the same rate as the initial borrowing. On December 17, 2013 the credit facility amendment increased the maximum amount of term loans allowed under the facility, and the Company borrowed an incremental $300.0 million aggregate principal amount at 98% of the face amount.

The term loan contains no financial maintenance covenants, is prepayable, and is secured by substantially all of the Company s assets. Quarterly principal payments of $3.5 million began in September 2012, increased to $4.125 million per quarter as a result of the incremental borrowing in November, 2012, and increased further to $4.875 million with the December 17, 2013 borrowing. A balloon payment of $1.8 billion is due in May, 2018. Interest is payable at a rate that is equal to a base of the greater of a LIBOR-based rate and 1.25%, plus 500 basis points.

2019 9.875% Notes

On November 21, 2012, the Company issued $375.0 million aggregate principal amount of 9.875% senior unsecured notes due 2019 (the 2019 9.875% Notes) at an issue price of 95.934% of the face amount. Interest is payable on the 2019 9.875% Notes annually on June 15 and December 15. The Company may redeem some or all of the notes at prices that are reflected as a percentage of the principal amount, as follows: 104.938% commencing December 15, 2016; 102.469% commencing December 15, 2017; and 100% on or after December 15, 2018.

The unsecured senior notes are guaranteed by substantially all of the Company s subsidiaries, except for Arch Receivable Company, LLC, which is the conduit for the accounts receivable securitization program, and the Company s subsidiaries outside the U.S.

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2019 Secured Notes

On December 17, 2013, the Company issued $350.0 million aggregate principal amount of 8.00% senior secured second lien notes due 2019 (the 2019 Secured Notes) at par. The 2019 Secured Notes are secured by the same assets that secure indebtedness under the senior secured term loan, but on a second priority basis, subject to certain exceptions and permitted liens. Interest is payable on the 2019 Secured Notes on January 15 and July 15 of each year. The Company may redeem some or all of the notes at prices that are reflected as a percentage of the principal amount, as follows: 104.0% commencing January 15, 2016, 102.0% commencing January 15, 2017, and 100% on or after January 15, 2018.

2020 Notes

The Company has outstanding $500.0 million in aggregate principal amount of 7.25% senior unsecured notes due in 2020 (2020 Notes) at par. Interest is payable on the 2020 Notes on April 1 and October 1 of each year. The Company may redeem some or all of the 2020 Notes during the respective 12 month periods at prices that are reflected as a percentage of the principal amount, as follows: 103.625% commencing October 1, 2015; 102.417% commencing October 1, 2016; 101.208% commencing October 1, 2017; and 100% on or after October 1, 2018.

2019 7% Notes and 2021 Notes

The Company has outstanding $1.0 billion of 7.00% unsecured senior notes due 2019 (2019 7% Notes) and $1.0 billion of 7.25% unsecured senior notes due 2021 (2021 Notes). Interest is payable on the 2019 7% Notes and 2021 Notes on June 15 and December 15 of each year. The Company may redeem some or all of the 2019 7% Notes at prices that are reflected as a percentage of the principal amount, as follows: 103.5% commencing June 15, 2015; 101.75% commencing June 15, 2016; and 100% on or after June 15, 2017. The Company may redeem some or all of the 2021 Notes at prices that are reflected as a percentage of the principal amount, as follows: 103.625% commencing June 15, 2016; 102.417% commencing June 15, 2017; 101.208% commencing June 15, 2018 and 100% on or after June 15, 2019. In each case, accrued and unpaid interest at the redemption date is due upon redemption.

Other Debt Retirements

On December 17, 2013, the Company retired the outstanding $600 million in aggregate principal amount of 8.75% senior unsecured notes due 2016 (2016 Notes) for $628.7 million with the proceeds from the incremental term loan and the 2019 Secured Notes. The Company recorded a $41.0 million loss related to this transaction which is reflected in the line Net loss resulting from early retirement of debt and debt restructuring in the Consolidated Statements of Operations.

Debt Maturities

The contractual maturities of debt as of December 31, 2015 are as follows, although $5.1 billion is classified as current due to the default caused by the Company s bankruptcy filing.

Year		
2016	$	35,674
2017		30,484
2018		1,858,567
2019		1,731,317
2020		501,642
Thereafter		1,000,574
	$	5,158,258

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Debt Covenants

Terms of the Company s credit facilities and leases contain covenants that limit the ability of the Company to, among other things, acquire, dispose, merge or consolidate assets; incur additional debt; pay dividends and make distributions or repurchase stock; make investments; create liens; issue and sell capital stock of subsidiaries; enter into restrictions affecting the ability of restricted subsidiaries to make distributions, loans or advances to the Company; engage in transactions with affiliates and enter into sale and leaseback transactions. Failure by the Company to comply with such covenants could result in an event of default, which, if not cured or waived, could have a material adverse effect on the Company.

Financing Costs

The Company did not incur any financing costs in 2015 and paid financing costs of $4.5 million and $20.5 million in conjunction with its financing activities during the years ended December 31, 2014 and 2013, respectively.

During the year ended December 31, 2015, the Company wrote off $3.7 million of deferred financing costs related to the termination of the revolver facility. Additionally, the company incurred $24.2 million of legal fees and financial advisory fees associated with debt restructuring activities in 2015. All amounts have been reflected in the line, Net loss resulting from early retirement and refinancing of debt in the Consolidated Statement of Operations.

15. Taxes

The Company is subject to U.S. federal income tax as well as income tax in multiple state jurisdictions. The tax years 2002 through 2015 remain open to examination for U.S. federal income tax matters and 1998 through 2015 remain open to examination for various state income tax matters.

Significant components of the provision for (benefit from) income taxes are as follows:

		Year Ended December 31	
	2015	**2014**	**2013**
		(In thousands)	
Current:			
Federal	$	$	$
State	3	25	(647)
Total current	3	25	(647)
Deferred:			
Federal	(329,393)	18,535	(318,956)
State	(43,990)	7,074	(15,895)

Total deferred		(373,383)		25,609		(334,851)
	$	(373,380)	$	25,634	$	(335,498)

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A reconciliation of the statutory federal income tax provision (benefit) at the statutory rate to the actual provision for (benefit from) income taxes follows:

	Year Ended December 31		
	2015	2014	2013
		(In thousands)	
Income tax provision (benefit) at statutory rate	$ (1,150,283)	$ (186,452)	$ (378,463)
Percentage depletion allowance	(19,035)	(12,692)	(15,796)
Goodwill			70,301
State taxes, net of effect of federal taxes	(76,445)	(3,903)	(25,265)
Change in valuation allowance	865,146	226,929	8,659
Other, net	7,237	1,752	5,066
	$ (373,380)	$ 25,634	$ (335,498)

In 2015, 2014 and 2013, compensatory stock options and other equity based compensation awards were exercised resulting in a tax expense of $6.7 million, $1.6 million and $1.5 million, respectively. The tax benefit will be recorded in paid-in capital at such point in time when a cash tax benefit is recognized.

Significant components of the Company s deferred tax assets and liabilities that result from carryforwards and temporary differences between the financial statement basis and tax basis of assets and liabilities are summarized as follows:

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	December 31, 2015	December 31, 2014
	(In thousands)	
Deferred tax assets:		
Net operating loss carryforwards	$ 1,086,332	$ 871,848
Alternative minimum tax credit carryforwards	120,994	127,169
Reclamation and mine closure	121,276	114,430
Goodwill	38,671	50,072
Workers compensation	42,835	38,924
Share based compensation	22,612	30,283
Acquired sales contracts	17,466	26,833
Retiree benefit plans	16,996	22,913
Contract obligations		15,693
Advance royalties	18,751	
Losses from disposed operations resulting from Patriot Coal bankruptcy	39,287	
Other, primarily accrued liabilities	45,303	64,503
Gross deferred tax assets	1,570,523	1,362,668
Valuation allowance	(1,135,399)	(270,251)
Total deferred tax assets	435,124	1,092,417
Deferred tax liabilities:		
Plant and equipment	389,169	1,354,396
Deferred development	41,047	95,129
Investment in tax partnerships		7,377
Other	4,706	5,533
Total deferred tax liabilities	434,922	1,462,435
Net deferred (asset) liability	(202)	370,018

The Company has federal net operating loss carryforwards for regular income tax purposes of $3.0 billion at December 31, 2015 that will expire between 2022 and 2035. The Company has an alternative minimum tax credit carryforward of $121.0 million at December 31, 2015, which has no expiration date and can be used to offset future regular tax in excess of the alternative minimum tax.

The Company recorded increases in its valuation allowance against its deferred tax assets of $865.1 million, $226.9 million and $8.7 million in 2015, 2014 and 2013, respectively. In 2015 and 2014, the Company determined that it would not realize the all of the benefit from federal and state net operating losses, based on projections of reversing timing differences in the future. Adjustments in 2013 relate to certain state and foreign net operating loss benefits.

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A reconciliation of the beginning and ending amounts of gross unrecognized tax benefits follows:

		(In thousands)
Balance at January 1, 2013	$	31,150
Additions based on tax positions related to the current year		1,199
Additions for tax positions of prior years		688
Reductions as a result of lapses in the statute of limitations		(1,248)
Balance at December 31, 2013		31,789
Additions based on tax positions related to the current year		2,920
Balance at December 31, 2014		34,709
Additions for tax positions of the current year		4,168
Balance at December 31, 2015	$	38,877

If recognized, the entire amount of the gross unrecognized tax benefits at December 31, 2015 would affect the effective tax rate.

The Company recognizes interest and penalties related to unrecognized tax benefits in income tax expense. The Company had accrued interest and penalties of $1.7 million and $1.5 million at December 31, 2015 and 2014, respectively. In the next 12 months, no gross unrecognized tax benefits are expected to be reduced due to the expiration of the statute of limitations.

16. Asset Retirement Obligations

The Company s asset retirement obligations arise from the Federal Surface Mining Control and Reclamation Act of 1977 and similar state statutes, which require that mine property be restored in accordance with specified standards and an approved reclamation plan. The required reclamation activities to be performed are outlined in the Company s mining permits. These activities include reclaiming the pit and support acreage at surface mines, sealing portals at underground mines, and reclaiming refuse areas and slurry ponds.

The following table describes the changes to the Company s asset retirement obligation liability:

	Year Ended December 31,			
	2015		2014	
	(In thousands)			
Balance at January 1 (including current portion)	$	418,118	$	427,653
Accretion expense		33,680		32,909
Obligations of divested operations		(334)		(30,684)
Adjustments to the liability from changes in estimates		(28,570)		627
Liabilities settled		(12,440)		(12,387)
Balance at December 31	$	410,454	$	418,118
Current portion included in accrued expenses		(13,795)		(19,222)
Noncurrent liability	$	396,659	$	398,896

As of December 31, 2015, the Company had $155.3 million in surety bonds outstanding, $485.5 million in self-bonding, and $11.2 million in letters of credit to secure reclamation bonding obligations.

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17. Fair Value Measurements

The hierarchy of fair value measurements assigns a level to fair value measurements based on the inputs used in the respective valuation techniques. The levels of the hierarchy, as defined below, give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs.

- Level 1 is defined as observable inputs such as quoted prices in active markets for identical assets. Level 1 assets include available-for-sale equity securities, U.S. Treasury securities, and coal swaps and futures that are submitted for clearing on the New York Mercantile Exchange.

- Level 2 is defined as observable inputs other than Level 1 prices. These include quoted prices for similar assets or liabilities in an active market, quoted prices for identical assets and liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities. The Company s level 2 assets and liabilities include U.S. government agency securities and coal commodity contracts with fair values derived from quoted prices in over-the-counter markets or from prices received from direct broker quotes.

- Level 3 is defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions. These include the Company s commodity option contracts (coal and heating oil) valued using modeling techniques, such as Black-Scholes, that require the use of inputs, particularly volatility, that are rarely observable. Changes in the unobservable inputs would not have had a significant impact on the reported Level 3 fair values at December 31, 2015 and 2014.

The table below sets forth, by level, the Company s financial assets and liabilities that are recorded at fair value in the accompanying consolidated balance sheet:

	Fair Value at December 31, 2015			
	Total	Level 1	Level 2	Level 3
	(In thousands)			
Assets:				
Investments in marketable securities	$ 201,910	$ 11,713	$ 190,197	$
Derivatives	9,052	5,597	1,023	2,432
Total assets	$ 210,962	$ 17,310	$ 191,220	$ 2,432
Liabilities:				
Derivatives	$	$	$	$

	Fair Value at December 31, 2014			
	Total	Level 1	Level 2	Level 3

				(In thousands)				
Assets:								
Investments in marketable securities	$	254,099	$	5,145	$	248,954	$	
Derivatives		13,557		9,026		1,491		3,040
Total assets	$	267,656	$	14,171	$	250,445	$	3,040
Liabilities:								
Derivatives	$	766	$		$	766	$	

The Company s contracts with its counterparties allow for the settlement of contracts in an asset position with contracts in a liability position in the event of default or termination. For classification purposes, the Company records the net fair value of all the positions with these counterparties as a net asset or liability. Each level in the table above displays the underlying contracts according to their classification in the accompanying consolidated balance sheet, based on this counterparty netting.

The following table summarizes the change in the fair values of financial instruments categorized as level 3.

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	Year Ended December 31, 2015	2014
	(In thousands)	
Balance, beginning of period	$ 3,040	$ 4,946
Realized and unrealized losses recognized in earnings, net	(8,602)	(6,572)
Included in other comprehensive income	(1,341)	
Purchases	13,541	5,288
Issuances	(4,046)	(622)
Settlements	(160)	
Ending balance	$ 2,432	$ 3,040

Net unrealized losses of $2.7 million were recognized during the year ended December 31, 2015 related to level 3 financial instruments held on December 31, 2015.

Cash and Cash Equivalents

At December 31, 2015 and 2014, the carrying amounts of cash and cash equivalents approximate their fair value.

Fair Value of Long-Term Debt

At December 31, 2015 and 2014, the fair value of the Company s debt, including amounts classified as current, was $937.1 million and $2.7 billion, respectively. Fair values are based upon observed prices in an active market, when available, or from valuation models using market information, which fall into Level 2 in the fair value hierarchy.

18. Capital Stock

Stock Repurchase Plan

The Company s share repurchase program allows for the purchase of up to 1,400,000 shares of the Company s common stock. At December 31, 2015, 1,092,580 shares of common stock were available for repurchase under the plan. There is no expiration date on the program. Any future repurchases under the plan will be made at management s discretion and will depend on market conditions and other factors.

Reverse Stock Split

On August 4, 2015, the Company effected a 1-for-10 reverse stock split of our common stock. Each stockholder s percentage ownership and proportional voting power remain unchanged as a result of the reverse stock split. All applicable share data, per share amounts and related information in the Consolidated Financial Statements and notes thereto have been adjusted retroactively to give effect to the 1-for-10 reverse stock split.

19. Stock-Based Compensation and Other Incentive Plans

Under the Company s Stock Incentive Plan (the Incentive Plan), 3.1 million shares of the Company s common stock were reserved for awards to officers and other selected key management employees of the Company. The Incentive Plan provides the Board of Directors with the flexibility to grant stock options, stock appreciation rights, restricted stock awards, restricted stock units, performance stock or units, merit awards, phantom stock awards and rights to acquire stock through purchase under a stock purchase program (Awards). Awards the Board of Directors elects to pay out in cash do not impact the shares authorized in the Incentive Plan. Shares available for award under the plan were 1.0 million at December 31, 2015.

Stock Options

Stock options are granted at a strike price equal to the closing market price of the Company s common stock on the date of grant and are generally subject to vesting provisions of at least one year from the date of grant. Information regarding stock option activity under the Incentive Plan follows for the year ended December 31, 2015:

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	Common Shares	Weighted Average Exercise Price (In thousands)	Aggregate Intrinsic Value	Average Remaining Life (years)
Options outstanding at January 1	682	$ 198.41		
Canceled	(17)	$ 151.72		
Expired	(10)	$ 300.62		
Options outstanding at December 31	655	$ 198.15	$	4.6
Options exercisable at December 31	488	$ 213.00		4.4
Unvested options at December 31	167			

The remaining unvested options have a weighted average grant date fair value of $35.47 per share.

The total grant-date fair value of options vested during the years ended December 31, 2015, 2014 and 2013 was $3.8 million, $8.7 million and $8.9 million, respectively. The options provide for the continuation of vesting for retirement-eligible recipients that meet certain criteria. The expense for these options is recognized through the date that the employee first becomes eligible to retire and is no longer required to provide service to earn part or all of the award. Compensation expense related to stock options for the years ended December 31, 2015, 2014 and 2013 was $1.4 million, $3.2 million and $6.7 million, respectively. Unrecognized compensation cost related to the unvested stock options of $0.2 million at December 31, 2015 will be recognized in 2016.The majority of the cost relating to the stock-based compensation plans is included in Selling, general and administrative expenses in the accompanying consolidated statements of operations.

Weighted average assumptions used in the Black-Scholes option pricing model for granted options follow:

	Year Ended December 31, 2013
Weighted average grant-date fair value per share of options granted	$ 23.70
Assumptions (weighted average):	
Risk-free interest rate	0.65%
Expected dividend yield	2.30%
Expected volatility	66.7%
Expected life (in years)	4.5

Expected volatilities are based on historical stock price movement and implied volatility from traded options on the Company s stock. The expected life of options is determined based on historical exercise activity.

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Restricted Stock and Restricted Stock Unit Awards

The Company may issue restricted stock and restricted stock units, which require no payment from the employee. Restricted stock cliff-vests at various dates and restricted stock units either vest ratably over or vest at the end of three years. Compensation expense is based on the fair value on the grant date and is recorded ratably over the vesting period. The employee receives cash compensation equal to the amount of dividends that would have been paid on the underlying shares.

Information regarding restricted stock and restricted stock unit activity and weighted average grant-date fair value follows for the year ended December 31, 2015:

	Restricted Stock		Restricted Stock Units	
	Common Shares (In thousands)	**Weighted Average Grant-Date Fair Value**	**Common Shares (In thousands)**	**Weighted Average Grant-Date Fair Value**
Outstanding at January 1	2	$ 134.42	307	$ 60.53
Granted			169	12.84
Vested	(2)	134.42	(66)	104.90
Canceled			(21)	35.81
Outstanding at December 31			389	33.69

The Company s recognized expense related to restricted stock and restricted stock units was $5.9 million, $5.6 million, and $5.0 million for the years ended December 31, 2015, 2014 and 2013, respectively

Long-Term Incentive Compensation

The Company has a long-term incentive program that allows for the award of performance units. The total number of units earned by a participant is based on financial and operational performance measures, and may be paid out in cash or in shares of the Company s common stock. The Company recognizes compensation expense over the three year term of the grant. The liabilities are remeasured quarterly. The Company recognized $7.9 million, $10.1 million and $9.1 million for the years ended December 31, 2015, 2014 and 2013, respectively. The expense is included primarily in Selling, general and administrative expenses in the accompanying consolidated statements of operations. Amounts accrued and unpaid for all grants under the plan totaled $17.8 million and $21.1 million as of December 31, 2015 and 2014, respectively.

Deferred Compensation Plan

The Company maintains a deferred compensation plan that allows eligible employees to defer receipt of compensation until the dates elected by the participant. Participants in the plan may defer up to 85% of their base salaries and up to 100% of their annual incentive awards. The plan also allows participants to defer receipt of up to 100% of the shares under any restricted stock unit or performance-contingent stock awards. The amounts deferred are invested in accounts that mirror the gains and losses of a number of different investment funds, including a hypothetical investment in shares of the Company s common stock. Participants are always vested in their deferrals to the plan and any related earnings. The Company has established a grantor trust to fund the obligations under the plan. The trust has purchased corporate-owned life insurance to offset these obligations. The net cash surrender values of the policies of $14.3 million and $37.6 million at December 31, 2015 and 2014, respectively, are included in Other noncurrent assets in the accompanying consolidated balance sheets. The participants have an unsecured contractual commitment by the Company to pay the amounts due under the plan. Any assets placed in trust by the Company to fund future obligations of the plan are subject to the claims of creditors in the event of insolvency or bankruptcy, and participants are general creditors of the company as to their deferred compensation in the plans.

Under the plan, the Company credits each participant s account with the number of units equal to the number of shares or units that the participant could purchase or receive with the amount of compensation deferred, based upon the fair market value of the underlying investment on that date. The amount the employee will receive from the plan will be based on the number of

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units credited to each participant s account, valued on the basis of the fair market value of an equivalent number of shares or units of the underlying investment on that date. The liability under the plan was $19.5 million and $35.1 million at December 31, 2015 and 2014.

The Company s net income related to the deferred compensation plan for the years ended December 31, 2015, 2014 and 2013 was $0.9 million, $1.6 million and $2.6 million, respectively, most of which is included in Selling, general and administrative expenses in the accompanying consolidated statements of operations.

20. Workers Compensation Expense

The following table details the components of workers compensation expense:

	Year Ended December 31, 2015	Year Ended December 31, 2014	Year Ended December 31, 2013
	(In thousands)		
Total occupational disease	$ 15,199	$ 4,432	$ 6,137
Traumatic injury claims and assessments	16,781	19,924	21,089
Total workers compensation expense	$ 31,980	$ 24,356	$ 27,226

Summarized below is information about the amounts recognized in the accompanying consolidated balance sheets for workers compensation benefits:

	December 31, 2015	December 31, 2014
	(In thousands)	
Occupational disease costs	$ 90,836	$ 72,749
Traumatic and other workers compensation claims	38,309	38,256
Total obligations	129,145	111,005
Less amount included in accrued expenses	16,875	16,714
Noncurrent obligations	$ 112,270	$ 94,291

As of December 31, 2015, the Company had $148.2 million in surety bonds and letters of credit outstanding to secure workers compensation obligations.

21. Employee Benefit Plans

Defined Benefit Pension and Other Postretirement Benefit Plans

The Company provides funded and unfunded non-contributory defined benefit pension plans covering certain of its salaried and hourly employees. Benefits are generally based on the employee s age and compensation. The Company funds the plans in an amount not less than the minimum statutory funding requirements or more than the maximum amount that can be deducted for U.S. federal income tax purposes.

The Company also currently provides certain postretirement medical and life insurance coverage for eligible employees. Generally, covered employees who terminate employment after meeting eligibility requirements are eligible for postretirement coverage for themselves and their dependents. The salaried employee postretirement benefit plans are contributory, with retiree contributions adjusted annually, and contain other cost-sharing features such as deductibles and coinsurance. The Company s current funding policy is to fund the cost of all postretirement benefits as they are paid.

The idling of the Cumberland River mining operations in Appalachia in the third quarter of 2014 reduced the estimated years of future service for the CRCC Scotia Employee Association Pension Plan. On January 1, 2015, the Company s cash

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balance and excess plans were amended to freeze new service credits for any new or active employee. These two events triggered curtailment accounting, resulting in an immediate recognition of any unamortized gain or loss and the reduction in the projected benefit obligation which were recorded in the third and fourth quarter of 2014, respectively.

A curtailment was triggered in the third quarter of 2013 by reductions in employees expected years of future service resulting primarily from the sale of Canyon Fuel.

Obligations and Funded Status.

Summaries of the changes in the benefit obligations, plan assets and funded status of the plans are as follows:

	Pension Benefits		Other Postretirement Benefits	
	2015	2014	2015	2014
	(In thousands)			
CHANGE IN BENEFIT OBLIGATIONS				
Benefit obligations at January 1	$ 353,736	$ 355,468	$ 36,098	$ 42,531
Service cost	9	21,478	866	1,649
Interest cost	14,604	17,070	1,904	1,841
Re-entry of former Magnum employees			85,843	
Plan amendments		(23)		
Curtailments		(25,787)		
Benefits paid	(61,955)	(53,974)	(3,646)	(3,431)
Other-primarily actuarial loss (gain)	(5,102)	39,504	(17,605)	(6,492)
Benefit obligations at December 31	$ 301,292	$ 353,736	$ 103,460	$ 36,098
CHANGE IN PLAN ASSETS				
Value of plan assets at January 1	$ 336,709	$ 347,952	$	$
Actual return on plan assets	(1,679)	36,130		
Employer contributions	424	6,601	3,646	3,431
Benefits paid	(61,955)	(53,974)	(3,646)	(3,431)
Value of plan assets at December 31	$ 273,499	$ 336,709	$	$
Accrued benefit cost	$ (27,793)	$ (17,027)	$ (103,460)	$ (36,098)
ITEMS NOT YET RECOGNIZED AS A COMPONENT OF NET PERIODIC BENEFIT COST				
Prior service credit (cost)	$	$	$ 26,944	$ 21,972
Accumulated gain (loss)	(16,769)	(11,332)	11,313	9,125
	$ (16,769)	$ (11,332)	$ 38,257	$ 31,097
BALANCE SHEET AMOUNTS				
Current liability	$ (420)	$ (767)	$ (3,650)	$ (3,430)
Noncurrent liability	$ (27,373)	$ (16,260)	$ (99,810)	$ (32,668)
	$ (27,793)	$ (17,027)	$ (103,460)	$ (36,098)

Pension Benefits

The accumulated benefit obligation for all pension plans was $301.3 million and $353.7 million at December 31, 2015 and 2014, respectively.

Net actuarial loss of $3.0 million will be amortized from accumulated other comprehensive income into net periodic benefit cost in 2016.

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Other Postretirement Benefits

Prior service credit and net actuarial gain of $10.7 million and $2.3 million, respectively, will be amortized from accumulated other comprehensive income into net periodic benefit cost in 2016.

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Components of Net Periodic Benefit Cost. The following table details the components of pension and postretirement benefit costs (credits):

	Pension Benefits Year Ended December 31,			Other Postretirement Benefits Year Ended December 31,		
	2015	2014	2013	2015	2014	2013
	(In thousands)					
Service cost	$ 9	$ 21,478	$ 27,065	$ 866	$ 1,649	$ 2,027
Interest cost	14,604	17,070	16,207	1,904	1,841	1,739
Curtailments		(25,368)	47			(5,444)
Settlements	2,656	646				
Expected return on plan assets	(20,367)	(23,756)	(23,761)			
Amortization of prior service credits		(257)	(204)	(8,335)	(10,003)	(10,621)
Amortization of other actuarial losses	8,850	3,128	14,616	(2,109)	(761)	(252)
Net benefit cost (credit)	$ 5,752	$ (7,059)	$ 33,970	$ (7,674)	$ (7,274)	$ (12,551)

The differences generated from changes in assumed discount rates and returns on plan assets are amortized into earnings over a five-year period.

Assumptions. The following table provides the weighted average assumptions used to determine the actuarial present value of projected benefit obligations at December 31 of the respective years.

	Pension Benefits		Other Postretirement Benefits	
	2015	2014	2015	2014
Discount rate	4.59%	4.15%	4.57%	3.91%
Rate of compensation increase	N/A	N/A	N/A	N/A

The following table provides the weighted average assumptions used to determine net periodic benefit cost for the respective years ended December 31.

	Pension Benefits							Other Postretirement Benefits			
	2015		2014			2013		2015	2014	2013	
Discount rate	4.15%	5.08/	4.23/	4.14%	4.13/		5.05%	3.91%	4.58%	3.64/	4.58%
Rate of compensation increase	N/A		N/A			3.39%		N/A	N/A	N/A	N/A
	7.00%		7.75%			7.75%		N/A	N/A	N/A	N/A

Expected return on plan assets

The discount rates used in 2014 and 2013 were reevaluated during the year for settlements and the curtailments as described previously. The obligations are remeasured at an updated discount rate that impacts the benefit cost recognized subsequent to the remeasurement.

The Company establishes the expected long-term rate of return at the beginning of each fiscal year based upon historical returns and projected returns on the underlying mix of invested assets. The Company utilizes modern portfolio theory modeling techniques in the development of its return assumptions. This technique projects rates of return that can be generated through various asset allocations that lie within the risk tolerance set forth by members of the Company s pension committee (the

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Pension Committee). The risk assessment provides a link between a pension plan s risk capacity, management s willingness to accept investment risk and the asset allocation process, which ultimately leads to the return generated by the invested assets.

The health care cost trend rate assumed for 2016 is 7.1% and is expected to reach an ultimate trend rate of 4.5% by 2028. A one-percentage-point increase in the health care cost trend rate would increase the postretirement benefit obligation at December 31, 2015 by $9.4 million and the net periodic postretirement benefit cost for the year ended December 31, 2015 by $0.1 million.

Plan Assets

The Pension Committee is responsible for overseeing the investment of pension plan assets. The Pension Committee is responsible for determining and monitoring appropriate asset allocations and for selecting or replacing investment managers, trustees and custodians. The pension plan s current investment targets are 60% equity and 40% fixed income securities. The Pension Committee reviews the actual asset allocation in light of these targets on a periodic basis and rebalances among investments as necessary. The Pension Committee evaluates the performance of investment managers as compared to the performance of specified benchmarks and peers and monitors the investment managers to ensure adherence to their stated investment style and to the plan s investment guidelines.

The Company s pension plan assets at December 31, 2015 and 2014, respectively, are categorized below according to the fair value hierarchy as defined in Note 17, Fair Value Measurements :

	Total		Level 1		Level 2		Level 3	
	2015	2014	2015	2014	2015	2014	2015	2014
				(In thousands)				
Equity Securities:(A)								
U.S. small-cap	$ 11,640	$ 16,512	$ 11,640	$ 16,512	$	$	$	$
U.S. mid-cap	28,524	46,481	10,979	17,301	17,545	29,180		
U.S. large-cap	67,244	89,008	33,249	43,181	33,995	45,827		
Non-U.S.	18,785	25,905			18,785	25,905		
Fixed income securities:								
U.S. government securities(B)	18,844	13,708	18,183	12,988	661	720		
Non-U.S. government securities(C)	766	1,599			766	1,599		
U.S. government asset and mortgage backed securities(D)	1,056	830			1,056	830		
Corporate fixed income(E)	39,939	22,702			39,939	22,702		
State and local government securities(F)	5,725	8,005			5,725	8,005		

Other fixed income(G)		57,209		83,735						57,209		83,735				
Short-term investments(H)		3,898		6,818						3,898		6,818				
Other investments(I)		19,869		21,406						1,234		3,336		18,635		18,070
Total	$	273,499	$	336,709	$	74,051	$	89,982	$	180,813	$	228,657	$	18,635	$	18,070

(A) Equity securities includes investments in 1) common stock, 2) preferred stock and 3) mutual funds. Investments in common and preferred stocks are valued using quoted market prices multiplied by the number of shares owned. Investments in mutual funds are valued at the net asset value per share multiplied by the number of shares held as of the measurement date and are traded on listed exchanges.

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(B) U.S. government securities includes agency and treasury debt. These investments are valued using dealer quotes in an active market.

(C) Non-U.S. government securities includes debt securities issued by foreign governments and are valued utilizing a price spread basis valuation technique with observable sources from investment dealers and research vendors.

(D) U.S. government asset and mortgage backed securities includes government-backed mortgage funds which are valued utilizing an income approach that includes various valuation techniques and sources such as discounted cash flows models, benchmark yields and securities, reported trades, issuer trades and/or other applicable data.

(E) Corporate fixed income is primarily comprised of corporate bonds and certain corporate asset-backed securities that are denominated in the U.S. dollar and are investment-grade securities. These investments are valued using dealer quotes.

(F) State and local government securities include different U.S. state and local municipal bonds and asset backed securities, these investments are valued utilizing a market approach that includes various valuation techniques and sources such as value generation models, broker quotes, benchmark yields and securities, reported trades, issuer trades and/or other applicable data.

(G) Other fixed income investments are actively managed fixed income vehicles that are valued at the net asset value per share multiplied by the number of shares held as of the measurement date.

(H) Short-term investments include governmental agency funds, government repurchase agreements, commingled funds, and pooled funds and mutual funds. Governmental agency funds are valued utilizing an option adjusted spread valuation technique and sources such as interest rate generation processes, benchmark yields and broker quotes. Investments in governmental repurchase agreements, commingled funds and pooled funds and mutual funds are valued at the net asset value per share multiplied by the number of shares held as of the measurement date.

(I) Other investments includes cash, forward contracts, derivative instruments, credit default swaps, interest rate swaps and mutual funds. Investments in interest rate swaps are valued utilizing a market approach that includes various valuation techniques and sources such as value generation models, broker quotes in active and non-active markets, benchmark yields and securities, reported trades, issuer trades and/or other applicable data. Forward contracts and derivative instruments are valued at their exchange listed price or broker quote in an active market. The mutual funds are valued at the net asset value per share multiplied by the number of shares held as of the measurement date and are traded on listed exchanges.

During 2013, the plan invested $16.0 million in Level 3 investments. Subsequent changes in fair value are the result of unrealized gains on the investment.

Cash Flows. The Company expects to make contributions of $0.5 million to the pension plans in 2016, which is impacted by the Moving Ahead for Progress in the 21st Century Act (MAP-21). MAP-21 does not reduce the Company s obligations under the plan, but redistributes the timing of required payments by providing near term funding relief for sponsors under the Pension Protection Act.

The following represents expected future benefit payments from the plan, which reflect expected future service, as appropriate:

	Pension Benefits	Other Postretirement Benefits
	(In thousands)	
2016	$ 19,164	$ 8,356
2017	20,320	8,341
2018	21,833	8,344
2019	21,341	8,281
2020	21,461	8,245
Next 5 years	106,953	38,178
	$ 211,072	$ 79,745

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Other Plans

The Company sponsors savings plans which were established to assist eligible employees in providing for their future retirement needs. The Company s expense, representing its contributions to the plans, was $20.5 million, $22.9 million and $25.1 million for the years ended December 31, 2015, 2014 and 2013, respectively.

22. Loss Per Common Share

The effect of options, restricted stock and restricted stock units that were excluded from the calculation of diluted weighted average shares outstanding because the exercise price or grant price of the securities exceeded the average market price of the Company s common stock were: 1.0 million shares of common stock for the year ended December 31, 2015, and 0.8 million shares of common stock for each of the years ending December 31, 2014 and December 31, 2013. The weighted average share impacts of options, restricted stock and restricted stock units that were excluded from the calculation of weighted average shares due to the Company s incurring a net loss for the three years ending December 31, 2015, 2014 and 2013 were not significant.

23. Leases

The Company leases equipment, land and various other properties under non-cancelable long-term leases, expiring at various dates. Certain leases contain options that would allow the Company to extend the lease or purchase the leased asset at the end of the base lease term.

In addition, the Company enters into various non-cancelable royalty lease agreements under which future minimum payments are due.

Minimum payments due in future years under these agreements in effect at December 31, 2015 are as follows:

	Operating Leases	Royalties
	(In thousands)	
2016	$ 20,857	$ 8,947
2017	17,277	13,991
2018	6,412	13,097
2019	3,448	12,295
2020	2,151	11,996
Thereafter	9,807	103,771
	$ 59,952	$ 164,097

Obligations for the future minimum payments under capital leases for equipment totaling $40.0 million and $46.0. million at December 31, 2015 and 2014, respectively, are included in other long term debt obligations in Note 14, Debt and Financing Arrangements .

Rental expense, including amounts related to these operating leases and other shorter-term arrangements, amounted to $28.4 million in 2015, $42.1 million in 2014 and $42.1 million in 2013.

Royalties are paid to lessors either as a fixed price per ton or as a percentage of the gross selling price of the mined coal. Royalties under the majority of the Company s significant leases are paid on the percentage of gross selling price basis. Royalty expense, including production royalties, was $227.7 million in 2015, $242.5 million in 2014 and $261.1 million in 2013.

As of December 31, 2015, certain of the Company s lease obligations were secured by outstanding surety bonds totaling $49.4 million.

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24. Risk Concentrations

Credit Risk and Major Customers

The Company has a formal written credit policy that establishes procedures to determine creditworthiness and credit limits for trade customers and counterparties in the over-the-counter coal market. Generally, credit is extended based on an evaluation of the customer s financial condition. Collateral is not generally required, unless credit cannot be established. Credit losses are provided for in the financial statements and historically have been minimal.

The Company markets its steam coal principally to domestic and foreign electric utilities and its metallurgical coal to domestic and foreign steel producers. As of December 31, 2015 and 2014, accounts receivable from electric utilities of $83.8 million and $134.7 million, respectively, represented 72% and 64% of total trade receivables at each date. As of December 31, 2015 and 2014, accounts receivable from sales of metallurgical-quality coal of $32.8 million and $76.0 million, respectively, represented 28% and 36% of total trade receivables at each date.

The Company uses shipping destination as the basis for attributing revenue to individual countries. Because title may transfer on brokered transactions at a point that does not reflect the end usage point, they are reflected as exports, and attributed to an end delivery point if that knowledge is known to the Company. The Company s foreign revenues by geographical location are as follows:

	Year Ended December 31,		
	2015	2014	2013
		(In thousands)	
Europe	$ 170,314	$ 277,565	$ 371,363
Asia	96,523	156,057	160,404
North America	40,315	78,445	80,322
Central and South America	55,323	20,496	55,493
Brokered Sales	32,848	79,354	154,442
Total	$ 395,323	$ 611,917	$ 822,024

The Company is committed under long-term contracts to supply steam coal that meets certain quality requirements at specified prices. These prices are generally adjusted based on market indices. Quantities sold under some of these contracts may vary from year to year within certain limits at the option of the customer. The Company sold approximately 127.6 million tons of coal in 2015. Approximately 68% of this tonnage (representing approximately 55% of the Company s revenues) was sold under long-term contracts (contracts having a term of greater than one year). Long-term contracts range in remaining life from one to five years.

Third-party sources of coal

The Company uses independent contractors to mine coal at certain mining complexes. The Company also purchases coal from third parties that it sells to customers. Factors beyond the Company s control could affect the availability of coal produced for or purchased by the Company.

Disruptions in the quantities of coal produced for or purchased by the Company could impair its ability to fill customer orders or require it to purchase coal from other sources at prevailing market prices in order to satisfy those orders.

Transportation

The Company depends upon barge, rail, truck and belt transportation systems to deliver coal to its customers. Disruption of these transportation services due to weather-related problems, mechanical difficulties, strikes, lockouts, bottlenecks, and other events could temporarily impair the Company s ability to supply coal to its customers In the past, disruptions in rail service have resulted in missed shipments and production interruptions.

25. Commitments and Contingencies

The Company accrues for cost related to contingencies when a loss is probable and the amount is reasonably determinable. Disclosure of contingencies is included in the financial statements when it is at least reasonably possible that a material loss or an additional material loss in excess of amounts already accrued may be incurred.

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Allegheny Energy Supply (Allegheny), the sole customer of coal produced at the Company s subsidiary Wolf Run Mining Company s (Wolf Run) Sycamore No. 2 mine, filed a lawsuit against Wolf Run, Hunter Ridge Holdings, Inc. (Hunter Ridge), and ICG in state court in Allegheny County, Pennsylvania on December 28, 2006, and amended its complaint on April 23, 2007. Allegheny claimed that Wolf Run breached a coal supply contract when it declared *force majeure* under the contract upon idling the Sycamore No. 2 mine in the third quarter of 2006, and that Wolf Run continued to breach the contract by failing to ship in volumes referenced in the contract. The Sycamore No. 2 mine was idled after encountering adverse geologic conditions and abandoned gas wells that were previously unidentified and unmapped.

After extensive searching for gas wells and rehabilitation of the mine, it was re-opened in 2007, but with notice to Allegheny that it would necessarily operate at reduced volumes in order to safely and effectively avoid the many gas wells within the reserve. The amended complaint also alleged that the production stoppages constitute a breach of the guarantee agreement by Hunter Ridge and breach of certain representations made upon entering into the contract in early 2005. Allegheny voluntarily dropped the breach of representation claims later. Allegheny claimed that it would incur costs in excess of $100 million to purchase replacement coal over the life of the contract. ICG, Wolf Run and Hunter Ridge answered the amended complaint on August 13, 2007, disputing all of the remaining claims.

On November 3, 2008, ICG, Wolf Run and Hunter Ridge filed an amended answer and counterclaim against the plaintiffs seeking to void the coal supply agreement due to, among other things, fraudulent inducement and conspiracy. On September 23, 2009, Allegheny filed a second amended complaint alleging several alternative theories of liability in its effort to extend contractual liability to ICG, which was not a party to the original contract and did not exist at the time Wolf Run and Allegheny entered into the contract. No new substantive claims were asserted. ICG answered the second amended complaint on October 13, 2009, denying all of the new claims. The Company s counterclaim was dismissed on motion for summary judgment entered on May 11, 2010. Allegheny s claims against ICG were also dismissed by summary judgment, but the claims against Wolf Run and Hunter Ridge were not. The court conducted a non-jury trial of this matter beginning on January 10, 2011 and concluding on February 1, 2011.

At the trial, Allegheny presented its evidence for breach of contract and claimed that it is entitled to past and future damages in the aggregate of between $228 million and $377 million. Wolf Run and Hunter Ridge presented their defense of the claims, including evidence with respect to the existence of force majeure conditions and excuse under the contract and applicable law. Wolf Run and Hunter Ridge presented evidence that Allegheny s damages calculations were significantly inflated because it did not seek to determine damages as of the time of the breach and in some instances artificially assumed future nondelivery or did not take into account the apparent requirement to supply coal in the future. On May 2, 2011, the trial court entered a Memorandum and Verdict determining that Wolf Run had breached the coal supply contract and that the performance shortfall was not excused by force majeure. The trial court awarded total damages and interest in the amount of $104.1 million, which consisted of $13.8 million for past damages, and $90.3 million for future damages. ICG and Allegheny filed post-verdict motions in the trial court and on August 23, 2011, the court denied the parties motions. The court entered a final judgment on August 25, 2011, in the amount of $104.1 million, which included pre-judgment interest.

The parties appealed the lower court s decision to the Superior Court of Pennsylvania. On August 13, 2012, the Superior Court of Pennsylvania affirmed the award of past damages, but ruled that the lower court should have calculated future damages as of the date of breach, and remanded the matter back to the lower court with instructions to recalculate that portion of the award. On November 19, 2012, Allegheny filed a Petition for Allowance of Appeal with the Supreme Court of Pennsylvania and Wolf Run and Hunter Ridge filed an Answer. On July 2, 2013, the Supreme Court of Pennsylvania denied the Petition of Allowance. As this action finalized the past damage award, Wolf Run paid $15.6 million for the past damage amount, including interest, to Allegheny in July 2013. The court held a hearing on this matter on November 5, 2014 and on February 16, 2015 awarded Allegheny $7.5 million plus interest for the future damages. On April 6, 2015, the parties entered into a settlement agreement pursuant to which Wolf Run agreed to pay $15 million and both parties agreed to release and discharge the other party from any further contractual liability. As a result, the Company accrued an additional $2.8 million during the first quarter of 2015 to bring the total amount accrued up to the settlement amount which was paid during April 2015. The expense associated with the accrual is reflected in the line item Cost of sales .

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In addition, the Company is a party to numerous claims and lawsuits with respect to various matters. As of December 31, 2015 and 2014, the Company had accrued $2.8 million and $22.3 million, respectively, for all legal matters, including $2.8 million and $10.1 million, respectively, classified as current. The ultimate resolution of any such legal matter could result in outcomes which may be materially different from amounts the Company has accrued for such matters.

The Company has unconditional purchase obligations relating to purchases of coal, materials and supplies and capital commitments, other than reserve acquisitions, and is also a party to transportation capacity commitments. The future commitments under these agreements total $94.6 million in 2016, $25.4 million in 2017, $10.6 million in 2018, $11.3 million in 2019, $11.6 million in 2020 and $11.1 million thereafter. During the years ended December 31, 2015, 2014 and 2013, the Company fulfilled its commitments under agreements containing unconditional obligations. The Company recognized expense relating to transportation capacity agreements of $52.9 million, $36.5 million, and $12.0 million during the years ended December 31, 2015, 2014 and 2013, respectively.

26. Subsequent Events

Filing Under Chapter 11 of the United States Bankruptcy Code

On January 11, 2016 (the Petition Date), the Company and substantially all of its wholly owned domestic subsidiaries (the Filing Subsidiaries and, together with the Company, the Debtors) filed voluntary petitions for reorganization (collectively, the Bankruptcy Petitions) under Chapter 11 of Title 11 of the U.S. Code (the Bankruptcy Code) in the United States Bankruptcy Court for the Eastern District of Missouri (the Court). The Debtor s Chapter 11 Cases (collectively, the Chapter 11 Cases) are being jointly administered under the caption *In re Arch Coal, Inc., et al.* Case No. 16-40120 (lead case). Each Debtor will continue to operate its business as a debtor in possession under the jurisdiction of the Court and in accordance with the applicable provisions of the Bankruptcy Code and the orders of the Court.

The filing of the Bankruptcy Petitions constituted an event of default that accelerated the Company s obligations under the documents governing each of its 7.00% senior notes due 2019, 9.875% senior notes due 2019, 8.00% senior secured second lien notes due 2019, 7.25% senior notes due 2020, 7.25% senior notes due 2021 (together, the senior notes) and senior secured first lien term loan due 2018 (the Existing Credit Agreement) (collectively with the senior notes, the Debt Instruments), all as further described in Note 14, Debt and Financing Arrangements. Immediately after filing the Bankruptcy Petitions, the Company began notifying all known current or potential creditors of the Debtors of the bankruptcy filings.

Additionally, on the Petition Date, the New York Stock Exchange (the NYSE) determined that the Company s common stock was no longer suitable for listing pursuant to Section 8.02.01D of the NYSE continued listing standards and trading in the Company s common stock was suspended on January 11, 2016. We expect that the existing common stock of the Company will be extinguished upon the Company s emergence from Chapter 11 and existing equity holders will not receive consideration in respect of their equity interests.

On the Petition Date, the Debtors filed a number of motions with the Court generally designed to stabilize their operations and facilitate the Debtors transition into Chapter 11. Certain of these motions sought authority from the Court for the Debtors to make payments upon, or otherwise honor, certain pre-petition obligations (e.g., obligations related to certain employee wages, salaries and benefits and certain vendors and other providers essential to the Debtors businesses). The Court has entered orders approving the relief sought in these motions.

Pursuant to Section 362 of the Bankruptcy Code, the filing of the Bankruptcy Petitions automatically stayed most actions against the Debtors, including actions to collect indebtedness incurred prior to the Petition Date or to exercise control over the Debtors property. Subject to certain exceptions under the Bankruptcy Code, the filing of the Debtors Chapter 11 Cases also automatically stayed the continuation of most legal proceedings, including the third party litigation matters described under Item 3, Legal Proceedings, or the filing of other actions against or on behalf of the Debtors or their property to recover on, collect or secure a claim arising prior to the Petition Date or to exercise control over property of the Debtors bankruptcy estates, unless and until the Court modifies or lifts the automatic stay as to any such claim. Notwithstanding the general

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application of the automatic stay described above, governmental authorities may determine to continue actions brought under their police and regulatory powers.

As required by the Bankruptcy Code, the U.S. Trustee for the Eastern District of Missouri appointed an official committee of unsecured creditors (the Creditors Committee) on January 25, 2016. The Creditors Committee represents all unsecured creditors of the Debtors and has a right to be heard on all matters that come before the Court.

Restructuring Support Agreement

In connection with the filing of the Bankruptcy Petitions, the Company entered into a Restructuring Support Agreement, dated as of January 10, 2016 (the Restructuring Support Agreement), among the Debtors and holders of over 50% of the Company s first lien term loans under the Existing Credit Agreement (the Supporting First Lien Creditors), providing that the Supporting First Lien Creditors will support a restructuring of the Debtors, subject to the following terms and conditions contemplated therein, among others:

- existing common stock of the Company would likely be extinguished upon the Company s emergence from Chapter 11, and existing equity holders would likely not receive consideration in respect of their equity interests;

- claims against the Debtors arising under the DIP Facility (as defined below) would be paid in full in cash or receive such other treatment as may be consented to by the holders of such claims;

- claims against the Debtors of holders of first lien term loans would be exchanged for (a) a combination of cash and $326.5 million (principal amount) of new first lien debt that would be issued by the reorganized Company and (b) 100% of the common stock of the reorganized Company outstanding on the effective date of the plan, subject to dilution on account of a proposed new management incentive plan and the distribution to unsecured creditors of any new common stock and warrants (as described below);

- first lien term loan deficiency claims (subject to certain exceptions) as well as second lien notes, unsecured notes and general unsecured claims against the Debtors would be exchanged for either (1) common stock in the reorganized Company and warrants or (2) the value of the unencumbered assets of the Company, if any, after giving effect to certain other payments and claims;

- either the Company s existing accounts receivable securitization facility would be reinstated or a new letter of credit facility would be entered into by the Company, in either case on terms acceptable to Supporting First

Lien Creditors holding more than 66 2/3% of the aggregate amount of the first lien term loans held by Supporting First Lien Creditors; and

- the board of directors of the reorganized Company would consist of seven directors, at least one of whom would be independent, including the Company s Chief Executive Officers and six directors selected by certain of the Company s first-lien term lenders in consultation with the Company s Chief Executive Officer.

The Restructuring Support Agreement, if utilized as the basis for a plan of reorganization, is expected to reduce the Company s long-term debt by more than $4.5 billion.

We entered into an amendment to the Restructuring Support Agreement on February 25, 2016 (the RSA Amendment), which provides for the waiver of the termination event that would have occurred on February 25, 2016 as a result of the Debtors not having obtained Court approval of the assumption of the Restructuring Support Agreement within 45 days of the Petition Date. The Debtors had previously agreed, with the consent of the Majority Consenting Lenders under the Restructuring Support Agreement, to adjourn the Court hearing on the Restructuring Support Agreement at the request of the official committee of unsecured creditors appointed in the Debtors Chapter 11 cases. Pursuant to the RSA Amendment, unless otherwise agreed by the Majority Consenting Lenders, the Debtors are required to obtain Court approval of the assumption of the Restructuring Support Agreement on or before the date that is 90 days from the Petition Date.

The RSA Amendment also provides for a waiver of any termination event that otherwise would occur as a result of the dismissal of the Chapter 11 case of one of our subsidiaries following the sale of such subsidiary and a 45-day extension of the date after which the Debtors and the Majority Consenting Lenders may modify the proposed distributions to holders of unsecured claims if holders of more than $1.6125 billion of unsecured claims against the Debtors have not executed a restructuring support agreement substantially in the form of the Restructuring Support Agreement.

Securitization Agreement

On January 13, 2016, the Company agreed with its securitization financing providers (the Securitization Financing Providers) that, subject to certain amendments (the Amendments), they will continue the $200 million trade accounts receivable securitization facility provided to Arch Receivable Company, LLC, a non-debtor special-purpose entity that is a wholly owned subsidiary of the Company (Arch Receivable) (the Securitization Facility).

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Pursuant to the Amendments, which have been approved by the Court on a final basis, the Debtors agreed to a revised schedule of fees payable to the administrator and the Securitization Financing Providers. The cost of an advance backstopping a letter of credit issued under the Securitization Facility is determined by two factors: (a) a program fee of 2.65% per year and payable on each settlement date to each Securitization Financing Provider deemed to have made such an advance and (b) the discount, which is calculated based on each Securitization Financing Provider s costs, including its cost of the issuance and placement of short term promissory notes to fund such an advance.

In connection with the Securitization Facility, Arch Receivable has granted to the administrator (for the benefit of the securitization purchasers) a first priority security interest in all of its assets, including all outstanding accounts receivable generated by the Debtors from the sale of coal and sold through the Securitization Facility (including collections, proceeds and certain other interests related thereto) (the Receivables) and all proceeds thereof.

The agreements governing the Securitization Facility provide for the grant of analogous security interests by certain Debtors that generate Receivables from the sale of coal (such Debtors, the Originators). The agreements expressly state that the transfers of Receivables from the Originators to Arch and from Arch to Arch Receivable are intended to be true sales of the Receivables. However, if, against the intent of the parties (and notwithstanding entry of an order by the Court which provides that the transfers of the Receivables constitute true sales), any such transfer is recharacterized as a loan or extension of credit, each Originator has granted a first priority prepetition security interest in the Receivables and certain related collateral, pursuant to the agreements governing the Securitization Facility, for the ultimate benefit of the administrator and the Securitization Financing Providers (the Liens). The Debtors have agreed, in connection with the Amendments, to effectively extend such Liens to cover Receivables generated on or after the Petition Date.

The Originators do not guarantee the collection of Receivables that have been transferred to Arch Receivable. However, the Originators are obligated to reimburse Arch Receivable for inaccuracy of certain representations and warranties, dilution items with respect to Receivables and certain other limited indemnities (such obligations, the Repayment Amounts). Under the agreements governing the Securitization Facility, Arch Receivable is entitled to apply Repayment Amounts to amounts owed under the Securitization Facility.

Further, the Company has executed a performance guarantee through which it has promised to fulfill, or cause Arch Receivable, the designated servicer and each Originator to fulfill, each of their obligations under the agreements governing the Securitization Facility. In addition, as contemplated by the Amendments, the Originators have also executed a performance guarantee promising to fulfill obligations of all Originators under the agreements.

In addition, in connection with the Amendments, the Debtors have granted superpriority claims against the Debtors and in favor of Arch Receivable, the administrator and the Securitization Financing Providers in respect of certain of the Debtors obligations under the agreements governing the Securitization Facility, including the Repayment Amounts and certain other limited indemnification and other obligations of the Debtors under the agreements.

Debtor-In-Possession Financing

On January 21, 2016, the Superpriority Secured Debtor-in-Possession Credit Agreement as amended by the waiver and consent and Amendment No. 1, dated as of March 4, 2016, (the DIP Credit Agreement) was entered into by and among the Company, as borrower, certain of the Debtors, as guarantors (the Guarantors and, together with the Company, the Loan Parties), the lenders from time to time party thereto (the DIP Lenders) and Wilmington Trust, National Association, as administrative agent and collateral agent for the DIP Lenders (in such capacities, the DIP Agent).

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The DIP Credit Agreement, which has been approved by the Court on a final basis, provides for a super-priority senior secured debtor-in-possession credit facility (the DIP Facility) consisting of term loans (collectively, the DIP Term Loan) in the aggregate principal amount of up to $275 million that may be funded in not more than two draws not later than six months after the effective date of the DIP Facility (such six month period, the Availability Period). Any portion of the DIP Term Loan commitment that has not been funded on or prior to the end of the Availability Period will be permanently cancelled.

The maturity date of the DIP Facility is the earliest of (i) January 31, 2017, (ii) the date of the substantial consummation of a plan of reorganization that is confirmed pursuant to an order of the Court, (iii) the consummation of the sale of all or substantially all of the assets of the Loan Parties pursuant to Section 363 of the Bankruptcy Code and (iv) the date the obligations under the DIP Facility are accelerated pursuant to the terms of the DIP Credit Agreement. Borrowings under the DIP Facility bear interest at an interest rate per annum equal to, at the Company s option (i) LIBOR plus 9.00%, subject to a 1.00% LIBOR floor or (ii) the base rate plus 8.00%.

Obligations under the DIP Credit Agreement will be guaranteed on a super-priority senior secured basis by all existing and future wholly-owned domestic subsidiaries of Arch, and all newly created or acquired wholly-owned domestic subsidiaries of Arch, subject to customary limited exceptions.

The lenders under the DIP Credit Agreement will have a first priority lien on all encumbered and unencumbered assets of the Loan Parties (the DIP Lien), subject to a $75 million carve-out for super-priority claims relating to the Debtors bonding obligations, a customary professional fees carve-out and certain exceptions.

The Loan Parties are subject to certain financial maintenance covenants under the DIP Credit Agreement, including, without limitation, (i) maximum capital expenditures and (ii) minimum liquidity (defined as unrestricted cash and cash equivalents of the Company and its domestic subsidiaries (other than any securitization subsidiary or bonding subsidiary), *plus* withdrawable funds from brokerage accounts of the Company and its domestic subsidiaries (other than any securitization subsidiary or bonding subsidiary) *plus* any unused commitments that are available to be drawn by the Company pursuant to the terms of the DIP Credit Agreement) of (A) $300 million prior to the entry of the Final Order and (B) $500 million following the entry of the Final Order, in each case tested on a monthly basis. The DIP Credit Agreement contains customary affirmative and negative covenants and representations for debtor-in-possession financings. In addition to customary events of default for debtor-in-possession financings, the DIP Credit Agreement contains milestones relating to the Chapter 11 Cases and any failure to comply with such milestones constitutes an event of default.

The DIP Facility is subject to certain usual and customary prepayment events, including 100% of net cash proceeds of (i) debt issuances (other than debt permitted to be incurred under the terms of the DIP Credit Agreement), (ii) non-ordinary course asset sales or dispositions in excess of $50 million in the aggregate (with no individual asset sale or disposition in excess of $7.5 million) and (iii) any casualty event in excess of $50 million in the aggregate, subject to customary reinvestment rights, in each case to be applied to prepay the DIP Term Loan. At a hearing held on February 23, 2016 in the Chapter 11 Cases, the Court approved the DIP Financing on a final basis, overruling the objections of the Creditors Committee and certain other parties who asserted, among other things, that the DIP Financing was unnecessary and argued that the Debtors should enter into an alternate debtor-in-possession financing facility proposed by certain members of the Creditors Committee.

Other Non-Bankruptcy Items

On February 1, 2016, a mining company that Arch Coal, Inc. leases coal reserves to in Kentucky announced plans to idle its mining operations related to those reserves. At December 31, 2015, the Company had a net book value of $66.8 million on the approximate 22.0 million tons of reserves. As a result, the company will record an impairment charge representing the remaining net book value of the reserves in the first quarter of 2016.

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27. Segment Information

The Company s reportable business segments are based on the major coal producing basins in which the Company operates and may include a number of mine complexes. The Company manages its coal sales by coal basin, not by individual mining complex. Geology, coal transportation routes to customers, regulatory environments and coal quality or type are characteristic to a basin, and, accordingly, market and contract pricing have developed by coal basin. Mining operations are evaluated based on their per-ton operating costs (defined as including all mining costs but excluding pass-through transportation expenses), as well as on other non-financial measures, such as safety and environmental performance. The Company s reportable segments are the Powder River Basin (PRB) segment, with operations in Wyoming; and the Appalachia (APP) segment, with operations in West Virginia, Kentucky, Maryland and Virginia. All Other includes the Company s coal mining operations in Colorado and Illinois and the ADDCAR subsidiary (which was sold during the first quarter of 2014).

Operating segment results for the years ended December 31, 2015, 2014 and 2013 are presented below. The Company measures its segments based on adjusted earnings before interest, taxes, depreciation, depletion and amortization (Adjusted EBITDA). The Company s management believes that Adjusted EBITDA presents a useful measure of our ability to service existing debt and incur additional debt based on ongoing operations. Adjusted EBITDA does not reflect mine closure or impairment costs, since those are not reflected in the operating income reviewed by management. See Note 5, Impairment Charges and Mine Closure Costs for discussion of these costs. The Corporate, Other and Eliminations grouping includes these charges, as well as the change in fair value of coal derivatives and coal trading activities, net; corporate overhead; land management activities; other support functions; and the elimination of intercompany transactions.

The asset amounts below represent an allocation of assets consistent with the basis used for the Company s incentive compensation plans. The amounts in Corporate, Other and Eliminations represent primarily corporate assets (cash, receivables, investments, plant, property and equipment) as well as unassigned coal reserves, above-market acquired sales contracts and other unassigned assets.

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	PRB	APP	All Other	Corporate, Other and Eliminations	Consolidated
Year Ended December 31, 2015					
Revenues	$ 1,448,440	$ 834,606	$ 290,214	$	$ 2,573,260
Adjusted EBITDA	258,300	82,837	17,044	(108,064)	250,117
Depreciation, depletion and amortization	176,257	156,273	40,768	6,047	379,345
Amortization of acquired sales contracts, net	(4,158)	(4,653)			(8,811)
Total assets	1,648,916	843,583	310,949	2,303,290	5,106,738
Capital expenditures	22,535	20,599	11,135	64,755	119,024
Year Ended December 31, 2014					
Revenues	$ 1,490,377	$ 1,108,358	$ 338,384	$	$ 2,937,119
Adjusted EBITDA	198,074	110,693	56,612	(85,236)	280,143
Depreciation, depletion and amortization	168,522	205,732	40,125	4,369	418,748
Amortization of acquired sales contracts, net	(3,961)	(9,433)	207		(13,187)
Total assets	1,772,230	3,379,834	339,809	2,937,850	8,429,723
Capital expenditures	44,305	23,638	12,993	66,350	147,286
Year Ended December 31, 2013					
Revenues	$ 1,482,812	$ 1,145,801	$ 385,744	$	$ 3,014,357
Adjusted EBITDA	206,910	88,883	94,948	(138,595)	252,146
Depreciation, depletion and amortization	171,324	202,952	45,741	6,425	426,442
Amortization of acquired sales contracts, net	(3,656)	(10,364)	4,563		(9,457)
Total assets	1,841,835	3,971,764	402,922	2,773,672	8,990,193
Capital expenditures	9,784	167,759	23,122	96,319	296,984

A reconciliation of segment losses to consolidated loss from continuing operations before income taxes follows:

	Year Ended December 31, 2015	2014	2013
Adjusted EBITDA	$ 250,117	$ 280,143	$ 252,146
Depreciation, depletion and amortization	(379,345)	(418,748)	(426,442)
Amortization of acquired sales contracts, net	8,811	13,187	9,457
Asset impairment costs	(2,628,303)	(24,113)	(220,879)
Goodwill impairment			(265,423)
Losses from disposed operations resulting from Patriot Coal bankruptcy	(116,343)		
Settlement of UMWA legal claims			(12,000)
Interest expense, net	(393,549)	(383,188)	(374,664)
Nonoperating expense	(27,910)		(42,921)
Loss from continuing operations before income taxes	$ (3,286,522)	$ (532,719)	$ (1,080,726)

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28. Quarterly Selected Financial Data (unaudited)

		March 31 (a)		June 30 (a)		September 30 (a)		December 31 (a)
				(In thousands, except per share data)				
Year Ended December 31, 2015								
Revenues	$	677,005	$	644,462	$	688,544		563,249
Gross profit (loss)	$	14,256	$	(16,507)	$	47,275		(44,964)
Asset impairment and mine closure costs	$		$	19,146	$	2,120,292		488,865
Loss from operations	$	(19,712)	$	(69,546)	$	(2,236,772)	$	(539,033)
Net loss	$	(113,195)	$	(168,103)	$	(1,999,476)	$	(632,368)
Diluted loss per common share	$	(5.32)	$	(7.93)	$	(93.91)	$	(29.70)

		March 31 (a)		June 30 (a) (b)		September 30 (a) (b)		December 31 (a) (b)
				(In thousands, except per share data)				
Year Ended December 31, 2014								
Revenues	$	735,971	$	713,776	$	742,180	$	745,192
Gross profit (loss)	$	(49,842)	$	(6,350)	$	(5,851)	$	32,264
Asset impairment and mine closure costs	$		$	1,512	$	5,060	$	17,541
Loss from operations	$	(73,123)	$	(35,805)	$	(35,300)	$	(5,303)
Net loss	$	(124,140)	$	(96,860)	$	(97,218)	$	(240,135)
Diluted loss per common share	$	(5.85)	$	(4.57)	$	(4.58)	$	(11.31)

(a) Challenging coal markets resulted in impairment charges relating to mining and other operations, investments in equity method subsidiaries and prepaid mining royalties in 2015 and 2014. See further discussion in Note 5, Impairment Charges and Mine Closure Costs and Note 10, Equity Method Investments and Membership Interests in Joint Ventures.

(b) The Company determined that it would not realize the benefit from federal and state net operating losses it generated in 2014, based on projections of future taxable income, and as a result, recorded a valuation allowance against net operating losses of $23.8. million, $18.3 million, $15.8 million and $807.2 million in the second, third and fourth quarters of 2014, respectively.

29. Supplemental Consolidating Financial Information

Pursuant to the indentures governing Arch Coal, Inc. s senior notes, certain wholly-owned subsidiaries of the Company have fully and unconditionally guaranteed the senior notes on a joint and several basis. The following tables present consolidating financial information for (i) the Company, (ii) the issuer of the senior notes, (iii) the guarantors under the senior notes, and (iv) the entities which are not guarantors under the senior notes (Arch Receivable Company, LLC and the Company s subsidiaries outside the United States):

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Condensed Consolidating Statements of Operations and Comprehensive Income

Year Ended December 31, 2015

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Revenues	$	$ 2,573,260	$	$	$ 2,573,260
Costs, expenses and other					
Cost of sales (exclusive of items shown separately below)	22,378	2,186,804		(2,749)	2,206,433
Depreciation, depletion and amortization	3,775	375,568	2		379,345
Amortization of acquired sales contracts, net		(8,811)			(8,811)
Change in fair value of coal derivatives and coal trading activities, net		(1,583)			(1,583)
Asset impairment and mine closure costs	15,437	2,612,866			2,628,303
Losses from disposed operations resulting from Patriot Coal bankruptcy	116,343				116,343
Selling, general and administrative expenses	69,384	25,737	5,725	(2,063)	98,783
Other operating expense (income), net	5,869	13,021	(4,192)	4,812	19,510
	233,186	5,203,602	1,535		5,438,323
Loss from investment in subsidiaries	(2,574,565)			2,574,565	
Loss from operations	(2,807,751)	(2,630,342)	(1,535)	2,574,565	(2,865,063)
Interest expense, net					
Interest expense	(478,432)	(26,284)	(4,916)	111,653	(397,979)
Interest and investment income	27,510	82,881	5,692	(111,653)	4,430
	(450,922)	56,597	776		(393,549)
Net loss resulting from early retirement of debt and debt restructuring	(27,910)				(27,910)
Loss from continuing operations before income taxes	(3,286,583)	(2,573,745)	(759)	2,574,565	(3,286,522)
Provision for (benefit from) income taxes	(373,441)		61		(373,380)
Net loss	(2,913,142)	(2,573,745)	(820)	2,574,565	(2,913,142)
Total comprehensive loss	$ (2,918,198)	$ (2,579,601)	$ (820)	$ 2,580,421	$ (2,918,198)

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Condensed Consolidating Statements of Operations and Comprehensive Income

Year Ended December 31, 2014

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Revenues	$	$ 2,937,119	$	$	$ 2,937,119
Costs, expenses and other					
Cost of sales (exclusive of items shown separately below)	3,016	2,566,572		(3,395)	2,566,193
Depreciation, depletion and amortization	5,154	413,559	35		418,748
Amortization of acquired sales contracts, net		(13,187)			(13,187)
Change in fair value of coal derivatives and coal trading activities, net		(3,686)			(3,686)
Asset impairment and mine closure costs	3,642	20,471			24,113
Selling, general and administrative expenses	79,902	29,739	6,626	(2,044)	114,223
Other operating income, net	(4,480)	(15,726)	(4,987)	5,439	(19,754)
	87,234	2,997,742	1,674		3,086,650
Loss from investment in subsidiaries	(13,085)			13,085	
Loss from operations	(100,319)	(60,623)	(1,674)	13,085	(149,531)
Interest expense, net					
Interest expense	(463,823)	(26,137)	(4,259)	103,273	(390,946)
Interest and investment income	31,389	74,511	5,131	(103,273)	7,758
	(432,434)	48,374	872		(383,188)
Loss from continuing operations before income taxes	(532,753)	(12,249)	(802)	13,085	(532,719)
Provision for (benefit from) income taxes	25,600		34		25,634
Net loss	(558,353)	(12,249)	(836)	13,085	(558,353)
Total comprehensive loss	$ (592,804)	$ (34,439)	$ (836)	$ 35,275	$ (592,804)

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Condensed Consolidating Statements of Operations and Comprehensive Income

Year Ended December 31, 2013

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Revenues	$	$ 3,014,357	$	$	$ 3,014,357
Costs, expenses and other					
Cost of sales (exclusive of items shown separately below)	9,117	2,657,583		(3,564)	2,663,136
Depreciation, depletion and amortization	5,949	420,458	35		426,442
Amortization of acquired sales contracts, net		(9,457)			(9,457)
Change in fair value of coal derivatives and coal trading activities, net		7,845			7,845
Asset impairment and mine closure costs	78,150	142,729			220,879
Goodwill impairment		265,423			265,423
Selling, general and administrative expenses	88,820	39,825	7,038	(2,235)	133,448
Other operating income, net	4,209	(34,856)	(5,370)	5,799	(30,218)
	186,245	3,489,550	1,703		3,677,498
Loss from investment in subsidiaries	(328,889)			328,889	
Income (loss) from operations	(515,134)	(475,193)	(1,703)	328,889	(663,141)
Interest expense, net					
Interest expense	(449,614)	(24,747)	(4,214)	97,308	(381,267)
Interest and investment income	30,285	68,248	5,378	(97,308)	6,603
	(419,329)	43,501	1,164		(374,664)
Other non-operating expense					
Net loss resulting from early retirement of debt	(42,921)				(42,921)
Loss from continuing operations before income taxes	(977,384)	(431,692)	(539)	328,889	(1,080,726)
Provision for (benefit from) income taxes	(335,552)		54		(335,498)
Loss from continuing operations	(641,832)	(431,692)	(593)	328,889	(745,228)
Income from discontinued operations, net of tax		103,396			103,396
Net Loss	(641,832)	(328,296)	(593)	328,889	(641,832)
Total comprehensive income (loss)	$ (587,633)	$ (304,278)	$ (593)	$ 304,871	$ (587,633)

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Condensed Consolidating Balance Sheets

December 31, 2015

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Assets					
Cash and cash equivalents	$ 337,646	$ 100,428	$ 12,707	$	$ 450,781
Short term investments	200,192				200,192
Restricted cash			97,542		97,542
Receivables	12,463	3,153	124,581	(4,430)	135,767
Inventories		196,720			196,720
Other	83,017	38,794	969		122,780
Total current assets	633,318	339,095	235,799	(4,430)	1,203,782
Property, plant and equipment, net	7,747	3,610,869		413	3,619,029
Investment in subsidiaries	4,887,905			(4,887,905)	
Intercompany receivables		2,253,312		(2,253,312)	
Note receivable from Arch Western	675,000			(675,000)	
Other	39,302	243,806	819		283,927
Total assets	$ 6,243,272	$ 6,447,082	$ 236,618	$ (7,820,234)	$ 5,106,738
Liabilities and Stockholders Equity (Deficit)					
Accounts payable	$ 8,495	$ 119,633	$ 3	$	$ 128,131
Accrued expenses and other current liabilities	162,268	170,575	1,037	(4,430)	329,450
Current maturities of debt	5,096,460	10,750			5,107,210
Total current liabilities	5,267,223	300,958	1,040	(4,430)	5,564,791
Long-term debt		30,953			30,953
Intercompany payables	2,043,308		210,005	(2,253,313)	
Note payable to Arch Coal		675,000		(675,000)	
Asset retirement obligations	1,005	395,654			396,659
Accrued pension benefits	12,390	14,983			27,373
Accrued postretirement benefits other than pension	79,826	19,984			99,810
Accrued workers compensation	24,247	88,023			112,270
Deferred income taxes					
Other noncurrent liabilities	59,976	58,847	348		119,171
Total liabilities	7,487,975	1,584,402	211,393	(2,932,743)	6,351,027
Stockholders equity (deficit)	(1,244,703)	4,862,680	25,225	(4,887,491)	(1,244,289)
Total liabilities and stockholders equity (deficit)	$ 6,243,272	$ 6,447,082	$ 236,618	$ (7,820,234)	$ 5,106,738

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Condensed Consolidating Balance Sheets

December 31, 2014

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Assets					
Cash and cash equivalents	$ 572,185	$ 150,358	$ 11,688	$	$ 734,231
Short term investments	248,954				248,954
Restricted cash			5,678		5,678
Receivables	9,656	15,933	211,043	(4,615)	232,017
Inventories		190,253			190,253
Other	89,211	41,455	952		131,618
Total current assets	920,006	397,999	229,361	(4,615)	1,542,751
Property, plant and equipment, net	10,470	6,442,623	2	363	6,453,458
Investment in subsidiaries	7,464,221			(7,464,221)	
Intercompany receivables		2,021,110		(2,021,110)	
Note receivable from Arch Western	675,000			(675,000)	
Other	131,884	300,058	1,572		433,514
Total assets	$ 9,201,581	$ 9,161,790	$ 230,935	$ (10,164,583)	$ 8,429,723
Liabilities and Stockholders Equity					
Accounts payable	$ 23,394	$ 156,664	$ 55	$	$ 180,113
Accrued expenses and other current liabilities	85,899	220,017	1,095	(4,615)	302,396
Current maturities of debt	27,625	9,260			36,885
Total current liabilities	136,918	385,941	1,150	(4,615)	519,394
Long-term debt	5,084,839	38,646			5,123,485
Intercompany payables	1,817,755		203,355	(2,021,110)	
Note payable to Arch Coal		675,000		(675,000)	
Asset retirement obligations	981	397,915			398,896
Accrued pension benefits	5,967	10,293			16,260
Accrued postretirement benefits other than pension	4,430	28,238			32,668
Accrued workers compensation	9,172	85,119			94,291
Deferred income taxes	422,809				422,809
Other noncurrent liabilities	50,919	102,461	386		153,766
Total liabilities	7,533,790	1,723,613	204,891	(2,700,725)	6,761,569
Stockholders equity	1,667,791	7,438,177	26,044	(7,463,858)	1,668,154
Total liabilities and stockholders equity	$ 9,201,581	$ 9,161,790	$ 230,935	$ (10,164,583)	$ 8,429,723

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Condensed Consolidating Statements of Cash Flows

Year Ended December 31, 2015

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Cash provided by (used in) operating activities	$ (445,136)	$ 314,535	$ 86,234	$	$ (44,367)
Investing Activities					
Capital expenditures	(1,108)	(117,916)			(119,024)
Additions to prepaid royalties		(5,871)			(5,871)
Proceeds from disposals and divestitures		2,191			2,191
Purchases of short term investments	(246,735)				(246,735)
Proceeds from sales of short term investments	290,205				290,205
Proceeds from sales of equity investments and securities		2,259			2,259
Withdrawals (deposits) of restricted cash			(91,864)		(91,864)
Investments in and advances to affiliates	(913)	(10,589)			(11,502)
Cash provided by (used in) investing activities	41,449	(129,926)	(91,864)		(180,341)
Financing Activities					
Payments on term loan	(19,500)				(19,500)
Net payments on other debt	(2,692)	(8,640)			(11,332)
Expenses related to debt restructuring	(27,910)				(27,910)
Transactions with affiliates, net	219,250	(225,899)	6,649		
Cash provided by (used in) financing activities	169,148	(234,539)	6,649		(58,742)
Increase (decrease) in cash and cash equivalents	(234,539)	(49,930)	1,019		(283,450)
Cash and cash equivalents, beginning of period	572,185	150,358	11,688		734,231
Cash and cash equivalents, end of period	$ 337,646	$ 100,428	$ 12,707	$	$ 450,781

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Condensed Consolidating Statements of Cash Flows

Year Ended December 31, 2014

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Cash provided by (used in) operating activities	$ (324,688)	$ 305,048	$ (13,942)	$	$ (33,582)
Investing Activities					
Capital expenditures	(2,700)	(144,586)			(147,286)
Additions to prepaid royalties		(7,317)			(7,317)
Proceeds from disposals and divestitures	57,625	4,733			62,358
Purchases of short term investments	(211,929)				(211,929)
Proceeds from sales of short term investments	205,611				205,611
Proceeds from sales of investments in equity securities	9,464				9,464
Withdrawals (deposits) of restricted cash			(5,678)		(5,678)
Investments in and advances to affiliates	(2,541)	(14,116)			(16,657)
Cash provided by (used in) investing activities	55,530	(161,286)	(5,678)		(111,434)
Financing Activities					
Payments on term loan	(19,500)				(19,500)
Net payments on other debt	(1,258)	(4,437)			(5,695)
Debt financing costs	(2,219)		(2,300)		(4,519)
Dividends paid	(2,123)				(2,123)
Other	(15)				(15)
Transactions with affiliates, net	67,125	(89,385)	22,260		
Cash provided by (used in) financing activities	42,010	(93,822)	19,960		(31,852)
Increase (decrease) in cash and cash equivalents	(227,148)	49,940	340		(176,868)
Cash and cash equivalents, beginning of period	799,333	100,418	11,348		911,099
Cash and cash equivalents, end of period	$ 572,185	$ 150,358	$ 11,688	$	$ 734,231

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Condensed Consolidating Statements of Cash Flows

Year Ended December 31, 2013

	Parent/Issuer	Guarantor Subsidiaries	Non-Guarantor Subsidiaries (In thousands)	Eliminations	Consolidated
Cash provided by (used in) operating activities	$ (632,060)	$ 637,193	$ 50,609	$	$ 55,742
Investing Activities					
Capital expenditures	(3,320)	(293,664)			(296,984)
Proceeds from disposals and divestitures		433,453			433,453
Proceeds from sales-leaseback transaction		34,919			34,919
Investments in and advances to affiliates	(5,451)	(10,321)		512	(15,260)
Purchases of short term investments	(213,726)				(213,726)
Proceeds from sales of short term investments	194,537				194,537
Additions to prepaid royalties		(14,947)			(14,947)
Change in restricted cash	3,453				3,453
Cash provided by (used in) investing activities	(24,507)	149,440		512	125,445
Financing Activities					
Contributions from parent		512		(512)	
Proceeds from term loan and senior notes	644,000				644,000
Payments to retire debt	(628,660)				(628,660)
Payments on term loan	(17,250)				(17,250)
Net payments on other debt	(6,324)	(512)			(6,836)
Debt financing costs	(19,864)		(625)		(20,489)
Dividends paid	(25,475)				(25,475)
Transactions with affiliates, net	838,160	(786,683)	(51,477)		
Cash provided by (used in) financing activities	784,587	(786,683)	(52,102)	(512)	(54,710)
Increase in cash and cash equivalents	128,020	(50)	(1,493)		126,477
Cash and cash equivalents, beginning of period	671,313	100,468	12,841		784,622
Cash and cash equivalents, end of period	$ 799,333	$ 100,418	$ 11,348	$	$ 911,099

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Schedule II

Arch Coal, Inc. and Subsidiaries

Valuation and Qualifying Accounts

	Balance at Beginning of Year	Additions (Reductions) Charged to Costs and Expenses	Charged to Other Accounts (In thousands)	Deductions (a)	Balance at End of Year
Year ended December 31, 2015					
Reserves deducted from asset accounts:					
Accounts receivable and other receivables	$ 159	$ 7,683	$	$	$ 7,842
Current assets supplies and inventory	6,625	431	(b)	1,065	5,991
Deferred income taxes	270,251	865,148			1,135,399
Year ended December 31, 2014					
Reserves deducted from asset accounts:					
Accounts receivable and other receivables	$ 775	$	$	$ 616	$ 159
Current assets supplies and inventory	8,446	580	(76)(b)	2,325	6,625
Deferred income taxes	43,322	226,929			270,251
Year ended December 31, 2013					
Reserves deducted from asset accounts:					
Accounts receivable and other receivables	$ 1,043	$ 346	$	$ 614	$ 775
Current assets supplies and inventory	12,589	503	(2,274)	2,372	$ 8,446
Deferred income taxes	34,663	8,659			$ 43,322

(a) Reserves utilized, unless otherwise indicated.

(b) Disposition of subsidiaries