

ARCH COAL INC
Form 10-K
February 29, 2012

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

Form 10-K

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

For the fiscal year ended December 31, 2011

Commission file number: 1-13105

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction
of incorporation or organization)

43-0921172

(I.R.S. Employer
Identification Number)

One CityPlace Drive, Ste. 300, St. Louis, Missouri

(Address of principal executive offices)

63141

(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	New York Stock Exchange Chicago Stock Exchange

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

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

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

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

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

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

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company

(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the registrant (excluding outstanding shares beneficially owned by directors, officers and treasury shares) as of June 30, 2011 was approximately \$5.6 billion.

On February 15, 2012, 213,292,678 shares of the company's common stock, par value \$0.01 per share, were outstanding.

Portions of the registrant's definitive proxy statement for the annual stockholders' meeting to be held on April 26, 2012 are incorporated by reference into Part III of this Form 10-K.

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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," "plans," "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:

market demand for coal and electricity;

geologic conditions, weather and other inherent risks of coal mining that are beyond our control;

competition 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;

our ability to secure new coal supply arrangements or to renew existing coal supply arrangements;

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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 credit facility and other financing arrangements;

the availability and cost of surety bonds;

failure by Magnum Coal Company, which we refer to as Magnum, a subsidiary of Patriot Coal Corporation, to satisfy certain below-market contracts that we guarantee;

our ability to manage the market and other risks associated with certain trading and other asset optimization strategies;

terrorist attacks, military action or war;

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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

the other factors affecting our business described below under the caption "Risk Factors."

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. See Item 1A "Risk Factors," Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" and Item 7A "Quantitative and Qualitative Disclosures About Market Risk" for additional information about factors that may affect our businesses and operating results. 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. 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 law.

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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, 2011 (which includes sales of the former International Coal Group, Inc. after June 14, 2011), we sold approximately 156.9 million tons of coal, including approximately 5.5 million tons of coal we purchased from third parties, representing roughly 14% of the 2011 U.S. coal supply. We sell substantially all of our coal to power plants, steel mills and industrial facilities. At December 31, 2011, we operated, or contracted out the operation of, 46 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 to most of the major coal-fueled power plants, industrial facilities and steel mills located within the United States and on four continents worldwide.

Significant federal and state environmental regulations affect the demand for coal. Existing environmental regulations limiting the emission of certain impurities caused by coal combustion and new regulations have had, and are likely to continue to have, a considerable impact on our business.

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, which we refer to as ARCO. 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 operates 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 455.0 million tons of coal reserves in Central Appalachia to Magnum.

On October 1, 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.

On June 15, 2011, we acquired International Coal Group, Inc., which owned and operated mines primarily in the Appalachian Region of the United States.

Coal Characteristics

In general, end users 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

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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, ranging from 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.

All of our identified coal reserves have been subject to preliminary coal seam analysis to test sulfur content. Of these reserves, approximately 67% consist of compliance coal, while an additional approximately 5% could be sold as low-sulfur coal. The balance is classified as high-sulfur coal. Higher sulfur coal can be burned in plants equipped with sulfur-dioxide emission reduction technology, such as scrubbers, and in facilities that blend compliance and noncompliance coal.

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, are important characteristics of coal and help 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

Global Coal Supply and Demand. Recovery from the 2008 upheaval in the global financial markets remained uneven in 2011 with future prospects uncertain because of ongoing sovereign debt problems, mostly centered in the European Union. Economic growth rates were also uneven with emerging economies continuing to show relative strength, while advanced economies generally experienced only modest growth. International coal demand continued to show strength through the year; however, there were some signs of weakness toward the end of the year. The

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United States exported an estimated 107 million tons in 2011, based on Energy Information Administration data, the highest level since 1991.

Coal is traded globally and can be transported to demand centers by ship, rail, barge, and truck. Total hard coal production in 2010 increased 6.8% over 2009 to 6.2 billion tonnes, while global production of brown coal was relatively flat at 1.04 billion tonnes in 2010, according to the International Energy Agency (IEA). China remains the largest producer of coal in the world, producing over 3.16 billion tonnes in 2010, according to the IEA. The United States and India follow China with hard coal production of approximately 932 million tonnes and 538 million tonnes, respectively, in 2010. Despite being the largest producer of hard coal globally, China surpassed Japan in 2011 as the largest importer of coal with imports of more than 180 million tonnes. Japan imported 175 million tonnes, followed by South Korea with 125 tonnes. Total global cross-border hard coal trade rose in 2011 to over 1.2 billion tons.

Global coal demand grew by more than 11% in 2010. Power generation remains the main driver of global coal demand as projected in all of the IEA's World Energy Outlook scenarios. China and India account for over 67% of the projected demand increase in the IEA's New and Current Policies scenarios. Metallurgical or coking coal is used in the steel making process. The steel industry uses metallurgical coal, which is distinguishable from other types of coal by its high carbon content, low expansion pressure, low sulfur content and various other chemical attributes. As such, the price offered by steel makers for metallurgical coal is generally higher than the price offered by power plants and industrial users for steam coal. Coal is used in nearly 70% of global steel production. In 2011, approximately 1.5 billion tonnes of steel was produced, a 6.8% increase over 2010 and up nearly 23% over 2009's reduced levels.

Among the nations principally supplying coal to the global power and steel markets are Australia, historically the world's largest coal exporter with exports of approximately 300 million tonnes in 2010, as well as Indonesia, Russia, United States, Colombia, and South Africa. Indonesia, in particular, has seen substantial growth in its coal exports in the last few years; however, its growing domestic energy demand may result in a decrease in exports as it moves toward greater self-sufficiency. Total United States exports continued to grow in 2011 as discussed below, up approximately 30% over 2010 as global economic conditions improved and pressure remained on global coal supply networks. We expect continued improvements in the demand for U.S. coal exports as economic growth continues, especially in the Asia-Pacific region, and as traditional supply movements adjust to meet the Asia-Pacific region's demands.

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. Coal consumption in the United States increased from 398.1 million tons in 1960 to approximately 1.0 billion tons in 2011, according to the Energy Information Administration's (EIA) Short Term Energy Outlook. Although full-year data for 2011 is not yet available, coal consumption has improved over what was lost during the global downturn that affected U.S. coal consumption in 2009. In 2010, coal consumption in the United States improved through stronger electricity demand driven by both a recovering economy and favorable weather.

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The following chart shows historical and projected demand trends for U.S. coal by consuming sector for the periods indicated, according to the EIA:

Sector	Actual 2006	Estimated 2011	Forecast			Annual Growth 2009-2035
			2012	2020	2035	
(Tons, in millions)						
Electric power	1,027	945	925	989	1,119	0.7%
Other industrial	59	49	48	49	47	0.1%
Coke plants	23	24	24	22	18	0.6%
Residential/commercial	3	3	4	3	3	-0.2%
Coal-to-liquids				13	128	n/a
Total U.S. coal consumption	1,112	1,020	1,002	1,076	1,315	1.1%

Source: EIA Annual Energy Outlook 2011
 EIA Short Term Energy Outlook (January 2012)
 EIA Monthly Energy Review (December 2011)

According to the EIA, coal accounted for approximately 42% of U.S. electricity generation from January through November 2011, and based on a projected 25% growth in electricity demand, coal consumption by the electric industry is expected to grow about 18% by 2035, reaching 1.1 billion tons. These amounts assume no future federal or state carbon emissions legislation is enacted and do not take into account subsequent market conditions. Historically, coal has been considerably less expensive than natural gas or oil.

The following chart shows the breakdown of U.S. electricity generation by energy source for January through November 2011, according to the EIA:

Source: EIA Electric Power Monthly (January 2012).

The average spot price for West Texas Intermediate oil in the United States averaged \$94.86/barrel in 2011, and, according to the EIA, will increase to \$100.25/barrel in 2012. Historically, volatile oil prices and global energy security concerns have increased interest in converting coal into liquid fuel, a process known as liquefaction. Liquid fuel produced from coal can be further refined to produce transportation fuels, such as low-sulfur diesel fuel, gasoline and other oil products, such as plastics and solvents. Currently, there are only a limited number of projects moving forward at this time.

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 is 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

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satisfy domestic demand for approximately 200 years. Annual coal production in the United States has increased from 434 million tons in 1960 to approximately 1.1 billion tons in 2011.

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 Illinois Basin.

Major regions in the West include the Powder River Basin and the Western Bituminous region. According to the EIA, coal produced in the western United States increased from 408 million tons in 1994 to an estimated 638 million tons in 2011, as competitive mining costs and regulations limiting sulfur-dioxide emissions have continued to increase demand for low-sulfur coal over this period. The Powder River Basin is located in northeastern Wyoming and southeastern Montana. 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. In addition, Powder River Basin coal is generally lower in heat value, which requires some electric power generation facilities to blend it with higher Btu coal or retrofit some existing coal plants to accommodate lower Btu coal. 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.

Regions in the East include the north, central and southern Appalachian regions. According to the EIA, coal produced in the Appalachian region decreased from 445 million tons in 1994 to an estimated 339 million tons in 2011, primarily as a result of the depletion of economically attractive reserves, permitting issues, availability of lower cost competitive fuels, 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 low 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 high 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 Illinois Basin includes Illinois, Indiana and western Kentucky and is the major coal production center in the interior region of the United States. According to the EIA, coal produced in the interior region decreased from 180 million tons in 1994 to approximately 166 million tons in 2011. Coal from the Illinois Basin generally has a heat value ranging from 10,100 to 12,600 Btu and has a high 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 pollution control devices, such as scrubbers, to reduce emissions.

U.S. Coal Exports and Imports. U.S. exports increased substantially in 2011 compared to 2010, supported by recovering global economies and continued growth in Chinese and Indian steel markets in particular. According to the EIA, exports of U.S. coal grew from 81 million tons in 2010 to 107 million tons in 2011. This is a trend we expect to continue as demand for U.S. coal grows in the seaborne market. Interest in access to the coal markets overseas has fueled considerable growth in developing new port capacity in the United States. We, along with other parties, have announced expanded or new port projects on the east coast, the Gulf coast and the west coast.

Historically, coal imported from abroad has represented a relatively small share of total U.S. coal consumption, and this remained the case in 2011. Imports did reach close to 36 million tons in 2007, but have fallen since then. According to the EIA, coal imports declined from 19 million tons in 2010 to 14 million in 2011. The decline is mostly attributed to more competitive pricing for domestic coal and stronger demand from non-U.S. markets for seaborne coal. Coal is imported into the United States primarily from Colombia, Indonesia and Venezuela. Imported coal generally serves coastal states along the Gulf of Mexico, such as Alabama and Florida, and states along the eastern seaboard. We expect imports into the United States to continue to decrease in the near-term as more and more global coal will likely be directed to Asia.

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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." In 2011, approximately 81% of the coal that we produced came from surface mining operations.

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:

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 in the table "Our Mining Operations - General." In 2011, approximately 19% of the coal that we produced came from underground mining operations.

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

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longwall mining, we use continuous miners 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. In 2011, approximately 14% of the coal that we produced came from underground mining operations generally using longwall mining techniques.

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, we cut a network of rooms into the coal seam, leaving a series of pillars of coal to support the roof of the mine. We use continuous miners to cut the coal and shuttle cars 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. We currently conduct retreat mining in certain underground mines. In 2011, the quantities of coal we recovered from retreat mining represented an insignificant portion of our total coal production. Once we finish mining in an area, we generally abandon that area and seal it from the rest of the mine.

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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 in a wide range of particle sizes. The majority of our mining operations in the Appalachia region and a few of our mines in the Western Bituminous 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 where, 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, 2011, we operated, or contracted out the operation of, 46 mines in the United States. We have three reportable business segments, which are based on the major coal producing basins in which the Company operates. The Company's reportable segments are the Powder River Basis (PRB) segment, with operations in Wyoming; the Western Bituminous (WBIT) segment, with operations in Utah, Colorado and southern Wyoming; the Appalachia (APP) segment, with operations in West Virginia, Kentucky, Maryland and Virginia; and our Other segment, which includes our operations in Illinois. Each of these reportable business segments includes a number of mine complexes. Geology, coal transportation routes to consumers, regulatory environments and coal quality are characteristic to a basin. These regional distinctions have caused market and contract pricing environments to develop by coal region and form the basis for the segmentation of our operations. We incorporate by reference the information about the operating results of each of our segments for the years ended December 31, 2011, 2010 and 2009 contained in Note 24 beginning on page F-45.

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. Our maintenance programs also employ procedures designed to enhance the efficiencies of our operations.

The following map shows the locations of our mining operations:

The following table provides a summary of information regarding our active mining complexes at December 31, 2011, the total sales associated with these complexes for the years ended December 31, 2009, 2010 and 2011, the total reserves associated with these complexes at December 31, 2011 and the Company's total

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unassigned reserves as of December 31, 2011. As indicated by the footnotes included in the table below, certain of the mining complexes listed below were acquired by us on June 15, 2011 as a result of our acquisition of International Coal Group, Inc. 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. The information included in the following table describes in more detail our mining operations, the coal mining methods used, certain characteristics of our coal and the method by which we transport coal from our mining operations to our customers or other third parties.

Mining Complex	Captive Mines ⁽¹⁾	Contract Mines ⁽¹⁾	Mining Equipment	Railroad	Tons Sold ⁽²⁾			Total Cost of Property, Plant and Equipment at December 31, 2011 (\$ in millions)	Assigned Reserves (Million tons)
					2009	2010	2011		
					(Million tons)				
Powder River Basin:									
Black Thunder	S		D, S	UP/BN	81.2	116.2	104.9	\$1,147.4	1,298.0
Coal Creek	S		D, S	UP/BN	9.8	11.4	10.0	155.5	176.2
Western Bituminous:									
Arch of Wyoming	S		L	UP	0.1	0.1	0.1	22.7	
Dugout Canyon	U		LW, CM	UP	3.2	2.3	2.2	140.5	15.0
Skyline	U		LW, CM	UP	2.8	2.9	2.9	189.3	15.2
Sufco	U		LW, CM	UP	6.6	6.1	6.1	232.1	48.6
West Elk	U		LW, CM	UP	4.0	4.8	5.7	480.0	88.3
Appalachia:									
Coal-Mac	S	U	L, E, CM,	NS/CSX	2.9	3.2	3.3	188.1	28.3
Cumberland River	S, U(2)	U(3)	HW	NS	1.6	1.5	2.2	181.3	28.5
Lone Mountain	U(4)		CM	NS/CSX	2.2	2.1	2.4	249.6	34.4
Mountain Laurel	U	S(2)	L, LW, CM	CSX	4.4	5.1	4.0	489.4	78.0
Eastern*	S, U		L, E, CM	CSX	N/A	N/A	0.8	61.6	8.4
Hazard/Flint Ridge*	S(4), U		L, S, CM	CSX	N/A	N/A	2.2	132.0	65.2
Knott County/Raven*	U(5)		CM	CSX	N/A	N/A	0.7	110.4	30.2
East Kentucky*	S		L	NS	N/A	N/A	0.3	25.5	1.2
Beckley*	U		CM	CSX	N/A	N/A	0.6	85.6	27.5
Vindex *	S(4), U		L, S	CSX	N/A	N/A	0.6	76.4	18.0
Patriot*	S		L	NS/CSX	N/A	N/A	0.3	29.2	4.1
Imperial*	U		CM	CSX	N/A	N/A	0.3	23.6	26.3
Sycamore No. 2*		U	CM	CSX	N/A	N/A	0.2	9.9	9.3
Sentinel*	U		CM	CSX	N/A	N/A	0.6	48.8	14.2
Tygart Valley*			CM, LW	CSX				77.5	166.0
Illinois:									
Viper*	U		CM		N/A	N/A	1.1	66.7	30.0
Totals					118.8	155.7	151.5	\$4,223.1	2,210.9 ⁽³⁾

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	

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CM = Continuous miner
HW = Highwall miner

*

Mining complex acquired on June 15, 2011 in connection with our acquisition of International Coal Group, Inc. The above table only shows tons sold from these mining complexes after June 14, 2011, and does not include tons sold by the prior owner in 2009, 2010 or 2011.

(1)

Amounts in parentheses indicate the number of captive and contract mines at the mining complex at December 31, 2011. 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)

Total assigned reserves does not include reserves assigned to non-active mining complexes.

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Powder River Basin

Black Thunder. Black Thunder is a surface mining complex located on approximately 34,500 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 1.3 billion tons of proven and probable reserves at December 31, 2011. The air quality permit for the Black Thunder mine allows for the mining of coal at a rate of 190 million tons per year. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2021 before annual output starts to significantly decline, although in practice production would drop in phases extending the ultimate mine life. 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 seven 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 176.2 million tons of proven and probable reserves at December 31, 2011. The air quality permit for the Coal Creek mine allows for the mining of coal at a rate of 50 million tons per year. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2025 before annual output starts to significantly decline. One tract of coal adjacent to the Coal Creek mining complex has been nominated for lease, and other potential areas of unleased coal remain available for nomination by us or other mining operations. The BLM will determine if these tracts will be leased and, if so, the final boundaries of, and the coal tonnage for, these tracts.

The Coal Creek complex currently consists of two 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.

Western Bituminous

Arch of Wyoming. Arch of Wyoming is a surface mining complex located in Carbon County, Wyoming. The complex currently consists of one active surface mine and four inactive mines located on approximately 55,100 acres that are in the final process of reclamation and bond release. The Arch of Wyoming mining complex extracts coal from the Johnson seam.

We control a significant portion of the coal reserves associated with this complex through federal, state and private leases. We currently do not have any tons assigned to the Arch of Wyoming mining operations. The air quality permit for the active Arch of Wyoming mining operation allows for the mining of coal at a rate of 2.5 million tons per year.

Dugout Canyon. Dugout Canyon mine is an underground mining complex located on approximately 18,600 acres in Carbon County, Utah. The Dugout Canyon mining complex has extracted steam coal from the Rock Canyon and Gilson seams.

We control a significant portion of the coal reserves through federal and state leases. The Dugout Canyon mining complex had approximately 15.0 million tons of proven and probable reserves at December 31, 2011. The

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coal seam currently being mined could sustain current production levels until approximately 2014, at which point we will need to transition to another coal seam to continue mining. We currently plan on idling longwall operations at the end of the current panel during the first quarter of 2012.

The complex currently consists of a longwall, two continuous miner sections and a truck loadout facility. We ship all of the coal to our customers via the Union Pacific railroad or by highway trucks. We wash a portion of the coal we produce at a 400-ton-per-hour preparation plant. The loadout facility can load approximately 20,000 tons of coal per day into highway trucks. Coal shipped by rail is loaded through a third-party facility capable of loading an 11,000-ton train in less than three hours.

Skyline. Skyline is an underground mining complex located on approximately 13,200 acres in Carbon and Emery Counties, Utah. The Skyline mining complex extracts steam coal from the Lower O'Conner A seam.

We control a significant portion of the coal reserves through federal leases and smaller portions through county and private leases. The Skyline mining complex had approximately 15.2 million tons of proven and probable reserves at December 31, 2011. The reserve area currently being mined could sustain current production levels through mid-2012, at which point we plan to transition to a new reserve area in order to continue mining.

The Skyline complex currently consists of a longwall, two continuous miner section and a loadout facility. We ship most of the coal raw to our customers via the Union Pacific railroad or by highway trucks. We process a portion of the coal mined at this complex at a nearby preparation plant. The loadout facility can load a 12,000-ton train in less than four hours.

Sufco. Sufco is an underground mining complex located on approximately 25,700 acres in Sevier County, Utah. The Sufco mining complex extracts steam coal from the Upper Hiawatha seam.

We control a significant portion of the coal reserves through federal and state leases. The Sufco mining complex had approximately 48.6 million tons of proven and probable reserves at December 31, 2011. The coal seam currently being mined could sustain current production levels through 2020, at which point a new coal seam will have to be accessed in order to continue mining.

The Sufco complex currently consists of a longwall, three continuous miner sections and a loadout facility located approximately 80 miles from the mine. We ship all of the coal raw to our customers via the Union Pacific railroad or by highway trucks. Processing at the mine site consists of crushing and sizing. The rail loadout facility is capable of loading an 11,000-ton train in less than three hours.

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 88.3 million tons of proven and probable reserves at December 31, 2011. Without the addition of more coal reserves, the current reserves could sustain current production levels through 2021 before annual output starts to significantly decline.

The West Elk complex currently consists of a longwall, two continuous miner sections and a loadout facility. We ship most of the coal raw to our customers via the Union Pacific railroad. In 2010, we finished constructing a new coal preparation plant with supporting coal handling facilities at the West Elk mine site. The loadout facility can load an 11,000-ton train in less than three hours.

Appalachia

Coal-Mac. Coal-Mac is a surface and underground mining complex located on approximately 46,800 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. Underground mining operations at the Coal-Mac mining complex extract steam coal from the Coalburg seam.

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We control a significant portion of the coal reserves through private leases. The Coal-Mac mining complex had approximately 28.3 million tons of proven and probable reserves at December 31, 2011. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2018 before annual output starts to significantly decline.

The complex currently consists of one captive surface mine, one contract underground 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.

Cumberland River. Cumberland River is an underground and surface mining complex located on approximately 19,900 acres in Wise County, Virginia and Letcher County, Kentucky. Surface mining operations at the Cumberland River mining complex extract steam and metallurgical coal from approximately 20 different coal seams from the Imboden seam to the High Splint No. 14 seam. Underground mining operations at the Cumberland River mining complex extract steam and metallurgical coal from the Imboden, Taggart Marker, Middle Taggart, Upper Taggart, Owl, and Parsons seams.

We control a significant portion of the coal reserves through private leases. The Cumberland River mining complex had approximately 28.5 million tons of proven and probable reserves at December 31, 2011. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2022 before annual output starts to significantly decline.

The complex currently consists of five underground mines (two captive, three contract) operating seven continuous miner sections, one captive surface operation, one captive highwall miner, a preparation plant and a loadout facility. We ship approximately one-third of the coal raw. We process the remaining two-thirds of the coal through a 750-ton-per-hour preparation plant before shipping it to our customers via the Norfolk Southern railroad. The loadout facility can load a 12,000-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 34.4 million tons of proven and probable reserves at December 31, 2011. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2023 before annual output starts to significantly decline.

The complex currently consists of four underground mines operating a total of nine 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. The loadout facility can load a 12,500-ton unit train in less than four hours.

Mountain Laurel. Mountain Laurel is an underground and surface mining complex located on approximately 38,300 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.

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We control a significant portion of the coal reserves through private leases. The Mountain Laurel mining complex had approximately 78.0 million tons of proven and probable reserves at December 31, 2011. The longwall mine is expected to operate through at least 2018 and potentially longer. In addition, the existing reserve base should support continuous miner operations for many years beyond that date.

The complex currently consists of one underground mine operating a longwall and a total of four continuous miner sections, two contract surface operations, 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.

Eastern. Eastern operates one surface mine and one underground mine, located on approximately 21,000 acres in Webster and Nicholas County, West Virginia. The Eastern complex is surface mining coal from the Freeport, Upper Kittanning, Middle Kittanning, Upper Clarion and Lower Clarion coal seams, and deep mining coal from the Stockton seam.

We control a significant portion of the coal reserves through private leases. The Eastern mining complex had approximately 8.4 million tons of proven and probable reserves at December 31, 2011. The mine is expected to operate through at least 2017.

Approximately twenty percent of the production from the surface mine is shipped direct, while the other eighty percent is washed at the complex's 700 ton-per-hour preparation plant. Coal is transported by conveyor belt from the preparation plant to the rail loadout, which is served by CSX via the A&O Railroad, a short-line carrier that is partially owned by CSX.

Hazard/Flint Ridge. Hazard/Flint Ridge is a mining complex that consists of four surface mines, an underground mining complex, a preparation plant, a unit train loadout and other support facilities located on approximately 115,000 acres in eastern Kentucky. The coal from Hazard's mines is being extracted from the Hazard 10, Hazard 9, Hazard 8, Hazard 7 and Hazard 5A seams. Nearly all of the surface-mined coal is marketed as a blend of shipped direct product with the remainder being processed at the Flint Ridge preparation plant. The underground coal is all processed. Coal is transported by on-highway trucks from the mines to the rail loadout, which is served by CSX. Some coal is direct shipped to the customer by truck.

A majority of the coal reserves are owned; the remainder are held through private leases. The mining complex had approximately 65.2 million tons of proven and probable reserves at December 31, 2011, which could sustain current production levels until at least 2030. The loadout facility can load a 12,500-ton train in less than 4 hours.

Knott County/Raven. Knott County operates five underground mines, two preparation plants, two rail loadouts and other facilities necessary to support the mining operations located on approximately 41,000 acres in Knott County, Kentucky. The mining complex is producing coal from the Elkhorn 2, Elkhorn 3 and Amburgy coal seams. All of Knott County's coal is transported by rail from two loadouts served by CSX.

We control a significant portion of the coal reserves through private leases. As of December 31, 2011 we had approximately 30.2 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until at least 2030.

East Kentucky. East Kentucky is a surface mining operation located on approximately 13,500 acres in Martin and Pike Counties, Kentucky, near the Tug Fork River. East Kentucky consists of one surface mine and one loadout facility. The loadout is serviced by Norfolk Southern railroad. The East Kentucky mining complex extracts coal from the Taylor, Coalburg, Winifrede, Buffalo and Stockton coal seams.

We control the coal reserves assigned to the East Kentucky mining complex through private leases. As of December 31, 2011 we had approximately 1.2 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2014.

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Beckley. The Beckley mining complex is located on approximately 23,400 acres in Raleigh County, West Virginia. Beckley is extracting high quality, low-volatile metallurgical coal in the Pocahontas No. 3 seam.

A significant portion of the coal reserves are controlled through private leases. As of December 31, 2011 we had approximately 27.5 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2030. 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 four surface mines located on approximately 42,400 acres in Garrett and Allegany Counties, Maryland. Mining operations at these surface mines extract coal from the Upper Freeport, Middle Kittanning, Pittsburgh, Little Pittsburgh and Redstone seams. In addition, Vindex operates one underground mine, in the Bakerstown seam of coal, and a preparation plant located in Grant and Tucker Counties, West Virginia.

We control all of the coal reserves through private leases. As of December 31, 2011 we had approximately 17.9 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until at least 2025.

Patriot. The Patriot mining complex consists of one surface mine and loadout facility located on approximately 3,200 acres in Monongalia County, West Virginia. Mining operations extract coal from the Waynesburg seam.

All of the coal reserves are controlled through private leases. As of December 31, 2011 we had approximately 4.1 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2017.

Imperial. The Imperial mining complex is an active underground mine located on approximately 59,500 acres in Upshur County, West Virginia. Mining operations extract coal from the Middle Kittanning seam. The coal is processed through the Sawmill Run preparation plant and shipped by CSX rail to customers.

As of December 31, 2011, the Imperial mining complex had approximately 26.3 million tons of proven and probable reserves. Without the addition of additional coal reserves, the reserves could sustain current production levels until 2055.

Sycamore No. 2. The Sycamore No. 2 mining complex is an active underground mine operated by a contract miner located on approximately 8,900 acres in Harrison County, West Virginia. Mining operations extract coal from the Pittsburgh seam. The coal produced by this mining complex is sold on a raw basis and is transported to current customers by truck.

As of December 31, 2011, the Sycamore No. 2 mining complex had approximately 9.3 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2028.

Sentinel. The Sentinel mining complex consists of one underground mine, a preparation plant and a loadout facility located 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.

We control a significant portion of the Clarion seam coal reserves through private leases. As of December 31, 2011 we had approximately 14.2 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2021.

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Tygart Valley. The Tygart Valley property, located in Taylor County, West Virginia included approximately 165.9 million tons of deep coal reserves as of December 31, 2011 of both steam and metallurgical quality coal in the Lower Kittanning seam, covering approximately 68,300 acres.

Construction of the Tygart Valley mining complex began in June 2010 and initial coal production commenced in November, 2011. At full output, Tygart Valley is designed to have 3.5 million tons of capacity per year of high quality coal that is well suited to both the utility market and the high volatile metallurgical market.

Illinois

Viper. Viper mining complex consists of one underground coal mine and a preparation plant located on approximately 43,500 acres in central Illinois near the city of Springfield. Mining operations extract coal from the Illinois No. 5 seam, also referred to as the Springfield seam.

We control a significant portion of the coal reserves through private leases. As of December 31, 2011 we had approximately 30 million tons of proven and probable reserves. Without the addition of more coal reserves, the current reserves could sustain current production levels until 2026.

Sales, Marketing and Trading

Overview. Coal prices are influenced by a number of factors and vary materially by region. As a result of these regional characteristics, prices of coal by product type within a given major coal producing region tend to be relatively consistent with each other. 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 cheaper 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 the Western Bituminous region and for 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 and a Western Bituminous mine. 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 and steel producers as well as industrial facilities. For the year ended December 31, 2011, we derived approximately 15% of our total coal revenues from sales to our three largest customers Tennessee Valley Authority, Donau Brennstoffkontor GmbH, and U.S. Steel and approximately 37% of our total coal revenues from sales to our 10 largest customers.

In 2011, we sold coal to domestic customers located in 39 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 2011 we also exported coal to North America, Europe, South America and Asia. Exports to foreign countries were \$920.0 million, \$471.5 million and \$194.4 million for the years ended December 31, 2011,

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2010 and 2009, respectively. The increasing export revenues are primarily the result of an increase in metallurgical-quality coal sales volumes, although steam coal exports have also increased. As of December 31, 2011 and 2010, trade receivables related to metallurgical-quality coal sales totaled \$117.4 million and \$24.9 million, respectively, or 31% and 12%, of total trade receivables, respectively. 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 destination for the year ended December 31, 2011, were as follows:

	December 31, 2011	
	(In thousands)	
Europe	\$	427,514
South America		120,842
North America		97,255
Asia		61,308
Brokered sales		213,087
Total	\$	920,006

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 2011, we sold approximately 72% 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 up to nine years. At December 31, 2011, the average volume-weighted remaining term of our long-term contracts was approximately 2.69 years, with remaining terms ranging from one to seven years. At December 31, 2011, remaining tons under long-term supply agreements, including those subject to price re-opener or extension provisions, were approximately 259 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, such as the Mine Improvement and New Emergency Response Act of 2006, which we refer to as the MINER Act, that affect our costs related to performance of the agreement. 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 and or changes in economic indices. 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. Under some of our

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contracts, we have the right to match lower prices offered to our customers by other suppliers. 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 as well as others. 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 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. Generally, our coal sales agreements allow our customer to suspend performance in the event that the railroad fails to provide its services due to circumstances that would constitute a *force majeure*.

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 the section entitled "Quantitative and Qualitative Disclosures About Market Risk" for more information about the market risks associated with these strategies at December 31, 2011.

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

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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. In the Western Bituminous region our customers are largely served by the Union Pacific railroad or by truck delivery. 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. Our Arch Coal Terminal is located in Catlettsburg, Kentucky on a 111-acre site on the Big Sandy River above its confluence with the Ohio River. The terminal provides coal and other bulk material storage and can load and offload river barges and trucks at the facility. The terminal can provide up to 500,000 tons of storage and can load up to six million tons of coal annually for shipment on the inland waterways.

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. We transport our coal to Atlantic or Pacific 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.

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 dredging and other upgrades to enable coal, alumina and cementitious material 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., Patriot Coal Corporation, 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. We also compete with companies that produce coal from one or more foreign countries, such as Colombia, Indonesia and Venezuela.

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 at our business such as dragline and shovel parts and related services. We believe adequate substitute suppliers are

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available. For more information about our suppliers, you should see "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 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 all applicable federal, state and local laws and regulations. However, due in part to the extensive and comprehensive 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 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. 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.

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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. On November 30, 2009, OSM announced that it would re-examine and reinterpret the regulations finalized eleven months earlier. We cannot predict how the regulations may change or how they may affect coal production, though there are reports that drafts of OSM's preferred alternative rule would, if finalized, 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

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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 \$0.315 per ton of coal produced from surface mines and \$0.135 per ton of coal produced from underground mines. In 2011, we recorded \$42.0 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.

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 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, 2011, we have self-bonded an aggregate of approximately \$420.5 million and have posted an aggregate of approximately \$301.5 million in surety bonds for reclamation purposes. In addition, we had approximately \$277.8 million of surety bonds and letters of credit outstanding at December 31, 2011 to secure workers' compensation, coal lease and other obligations.

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.

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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 new laws to address many of the same subjects. The costs of implementing these new 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 2011, we recorded \$85.4 million of expense related to this excise tax.

We are committed to the safety of our employees. In 2011, we spent approximately \$25.3 million on MINER Act compliance and other safety improvement matters. Our combined 2011 safety record was approximately 3.5 times better than the national coal industry average as measured by lost-time incident rates. In addition, our operations and facilities were honored with 25 national and state safety accolades in 2011, including three Sentinels of Safety honors from the U.S. Department of Labor's Mine Safety and Health Administration.

One way we work towards meeting a zero injury rate is developing and maintaining strong safety programs. Our subsidiaries launched behavior-based safety programs in 2006, which expanded our employees' involvement in our prevention process and in identifying at-risk behaviors before incidents occur. In 2011, we began implementing these programs in the operations we acquired from ICG. Since adopting these programs, our rates for total incidents and lost-time incidents have improved by approximately 39% and 45%, respectively. In addition, we routinely conduct regular safety drills and exercises with state safety and MSHA officials.

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 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 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 Cross State Air Pollution Rule (CSAPR) and Mercury and Air Toxics Standard (MATS), finalized in 2011 and discussed in more detail below. Regulation of additional emissions, such as greenhouse gases, has been announced for early 2012 by the U.S. Environmental Protection Agency, which we refer to as EPA, and those regulations will apply to new coal-fueled power plants. Other greenhouse gas regulations may apply to industrial boilers (see discussion of Climate Change, below). This application 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.

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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). The EPA designated all or part of 225 counties in 20 states as well as the District of Columbia as non-attainment areas with respect to the PM2.5 NAAQS. Those designations have been challenged. Individual states must 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. In addition, EPA announced, in February of 2011, that it intends to propose a revision to the PM2.5 NAAQS; although, the revision has not yet been proposed. Future regulation and enforcement of the new PM2.5 standard will affect many power plants, especially coal-fueled power plants, and all plants in non-attainment areas.

Ozone. Significant additional emission control expenditures will be required at coal-fueled power plants to meet the new NAAQS for ozone. 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. For example, on March 27, 2008, EPA promulgated a new 75 parts per billion (ppb) ozone primary NAAQS. On September 16, 2009, EPA announced that it will reconsider the new standard, and on January 19, 2010, EPA proposed its reconsidered NAAQS (75 Fed Reg 2938), proposing to adopt a new, more stringent primary ambient air quality standard for ozone and to change the way in which the secondary standard is calculated. However, following an announcement by the President that the new ozone standard would undergo additional review, EPA Administrator Jackson announced on September 2, 2011, that the next ozone NAAQS review will occur in 2013. If a new ozone NAAQS is promulgated, additional emission control expenditures will likely be required at coal-fueled power plants.

NOx SIP Call. The 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 have been or will be required to install additional emission control measures, such as selective catalytic reduction devices. Installation of additional emission control measures will make it more costly to operate coal-fueled power plants, which could make coal a less attractive fuel.

Clean Air Interstate Rule. The EPA finalized the Clean Air Interstate Rule, which we refer to as CAIR, in March 2005. CAIR calls for power plants in 28 Eastern states and the District of Columbia to reduce emission levels of sulfur dioxide and nitrous oxide pursuant to a cap and trade program similar to the system now in effect for acid deposition control and to that proposed by the Clean Skies Initiative. The stringency of the cap may require some coal-fueled power plants to install additional pollution control equipment, such as wet scrubbers, which could decrease the demand for low-sulfur coal at these plants and thereby potentially reduce market prices for low-sulfur coal. Emissions are permanently capped and cannot increase. 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. EPA proposed a revised transport rule on August 2, 2010, (75 Fed Reg 45209) and received thousands of comments on the proposal. 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

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appeals of the rule were filed and, on December 30, 2011, the Federal Court of Appeals for the District of Columbia Circuit stayed the rule. The appeal is scheduled to be heard in April of 2012. If the CSAPR is upheld, the additional controls required under the CSAPR may affect the market for coal inasmuch as multiple existing coal fired units are expected to be retired rather than having required controls installed.

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 to the vacatur, EPA announced an EGU Mercury and Air Toxics Standard (MATS) on December 16, 2011. The MATS is expected to be finalized in March or April of 2012. 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. The result of the EGU MATS and state mercury and air toxics controls is that these rules may adversely affect the demand for coal.

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 SIP's by December 17, 2007, that, among other things, was to identify facilities that would have to reduce emissions and comply with stricter emission limitations. The vast majority of states failed to submit their plans by December 17, 2007, and EPA issued a Finding of Failure to Submit plans on January 15, 2009 (74 Fed. Reg. 2392), which could trigger Federal implementation plans. EPA has taken no enforcement action against states to finalize implementation plans and is slowly dealing with the state Regional Haze SIPs that were submitted. Nonetheless, 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 changes to the new source review program may impact demand for coal nationally, but as the final form of the requirements after their revision is not yet known, we are unable to predict the magnitude of the impact.

Climate Change. One by-product of burning coal is carbon dioxide, which is considered a greenhouse gas and is a major source of concern with respect to global warming. In November 2004, Russia ratified the Kyoto Protocol to the 1992 Framework Convention on Global Climate Change, which establishes a binding set of emission targets for greenhouse gases. With Russia's acceptance, the Kyoto Protocol became binding on all those countries that had ratified it in February 2005. The United States has refused to ratify the Kyoto Protocol. Although the Kyoto targets varied from country to country, the United States Kyoto Protocol target reductions of greenhouse gas emissions would be to 93% of 1990 levels. Following the Kyoto meeting, multiple Conferences of the Parties have been held. None to date, including the most recent Conference of the Parties in Cancun, Mexico, in late November and early December of 2010, have resulted in any mandatory reduction requirements for the United States, but any such future conference may do so.

Future regulation of greenhouse gases in the United States could occur pursuant to future U.S. treaty obligations, statutory or regulatory changes under the Clean Air Act, federal or state adoption of a greenhouse gas regulatory scheme, or otherwise. The U.S. Congress has considered various proposals to reduce greenhouse gas emissions, but to date, none have become law. In April 2007, the U.S. Supreme Court rendered its decision in *Massachusetts v. EPA*, finding 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. On December 15, 2009, EPA published a formal determination that six greenhouse gases, including carbon dioxide and

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methane, endanger both the public health and welfare of current and future generations. In the same Federal Register rulemaking, EPA found that emission of greenhouse gases from new motor vehicles and their engines contribute to greenhouse gas pollution. Although Massachusetts v. EPA did not involve the EPA's authority to regulate greenhouse gas emissions from stationary sources, such as coal-fueled power plants, the decision is likely to impact regulation of stationary sources.

For example, a challenge in the U.S. Court of Appeals for the District of Columbia with respect to the EPA's decision not to regulate greenhouse gas emissions from power plants and other stationary sources under the Clean Air Act's new source performance standards was remanded to the EPA for further consideration in light of Massachusetts v. EPA. Other pending cases regarding greenhouse gases may affect the market for coal. In AEP v. Connecticut (582 F. 3d, 309, 2d Cir, 2009) the Second Circuit Court of Appeals held that States and private plaintiffs may maintain actions under federal common law alleging that five electric utilities have created a "public nuisance" by contributing to global warming, and may seek injunctive relief capping the utilities' CO₂ emissions at judicially-determined levels. However, the Supreme Court granted certiorari (10-174, US) on December 6, 2010, and reversed and remanded the Second Circuit Court's opinion on June 20, 2011.

On October 27, 2009, the EPA announced how it will establish thresholds for phasing-in and regulating greenhouse gas emissions under various provisions of the Clean Air Act. Three days later, on October 30, 2009, the EPA published a final rule in the Federal Register that requires the reporting of greenhouse gas emissions from all sectors of the American economy, and reporting of emissions from underground coal mines and coal suppliers was promulgated on July 12, 2010 (75 Fed Reg 39736). In addition, EPA has announced that it will establish permitting requirements for greenhouse gas emissions from electric utilities in early 2012. Those permitting rules may also decrease the demand for coal.

In the absence of federal legislation or regulation, many states and regions have adopted greenhouse gas initiatives. These state and regional climate change rules will likely require additional controls on coal-fueled power plants and industrial boilers and may even 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 regime, if implemented by the states in which our customers operate or at the federal level, will not affect the future market for coal in those regions. The permitting of new coal-fueled power plants has also recently been contested by state regulators and environmental organizations based on concerns relating to greenhouse gas emissions. Increased efforts to control greenhouse gas emissions could result in reduced demand for coal.

We believe that a diverse suite of clean coal technologies represents an essential tool for ultimately stabilizing greenhouse gas concentrations in the atmosphere. As a result, we have invested in several projects seeking to advance a variety of clean coal technologies, and will continue to evaluate additional opportunities for potential investment. We currently own a 24% interest in DKRW Advanced Fuels LLC, which is developing a facility to convert coal into gasoline, while capturing much of the carbon dioxide produced in the conversion process for use in enhanced oil recovery (EOR) applications. In addition, we own a 35% interest in Tenaska Trailblazer Partners, LLC, which is planning to construct a pulverized coal-fueled electric generating station in West Texas targeting a post-combustion capture of 85% - 90% of the carbon dioxide.

Clean Water Act. The federal Clean Water Act 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 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:

Wastewater 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

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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.

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 2007 NWP 21, on July 15, 2009, the Corps proposed to immediately suspend the use of the NWP 21 in six Appalachian states, including West Virginia, Kentucky and Virginia where the Company conducts operations. In addition, in the same notice, the Corps proposed to modify the NWP 21 following the receipt and review of public comments to prohibit its further use in the same states during the remaining term of the permit which is March 12, 2012. On June 17, 2010, the Corps announced that it had suspended the use of NWP 21 in the same six states it continues to be available elsewhere. The Corps' decision, however, 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 authorized for small underground coal mines that must construct fills as part of their mining operations.

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The use of nationwide permits to authorize stream impacts from mining activities has been the subject of significant litigation. You should see 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 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, 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, 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. 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.

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

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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 February 15, 2012, we employed a total of approximately 7,442 full and part-time employees, approximately 275 of whom are represented by the Scotia Employees Association. 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 28, 2012 and their positions and offices during the last five years:

Name	Age	Position
C. Henry Besten, Jr.	63	Mr. Besten has served as our Senior Vice President Strategic Development since 2002.
John T. Drexler	42	Mr. Drexler has served as our Senior Vice President and Chief Financial Officer since April 2008. Mr. Drexler served as our Vice President Finance and Accounting from March 2006 to April 2008. From March 2005 to March 2006, Mr. Drexler served as our Director of Planning and Forecasting. Prior to March 2005, Mr. Drexler held several other positions within our finance and accounting department.
John W. Eaves	54	Mr. Eaves has served as our President and Chief Operating Officer since April 2006. Mr. Eaves has also been a director since February 2006. From 2002 to April 2006, Mr. Eaves served as our Executive Vice President and Chief Operating Officer. Mr. Eaves also serves on the board of directors of ADA-ES, Inc. and CoaLogix.
Sheila B. Feldman	57	Ms. Feldman has served as our Vice President Human Resources since 2003. From 1997 to 2003, Ms. Feldman was the Vice President Human Resources and Public Affairs of Solutia Inc.
Robert G. Jones	55	Mr. Jones has served as our Senior Vice President Law, General Counsel and Secretary since August 2008. Mr. Jones served as Vice President Law, General Counsel and Secretary from 2000 to August 2008.
Paul A. Lang	51	Mr. Lang has served as our Executive Vice President Operations since August 2011. Mr. Lang served as Senior Vice President Operations from December 2006 through August 2011, as President of Western Operations from July 2005 through December 2006 and President and General Manager of Thunder Basin Coal Company, L.L.C. from 1998 through July 2005.
Steven F. Leer	59	Mr. Leer has served as our Chairman and Chief Executive Officer since April 2006. Mr. Leer served as our President and Chief Executive Officer from 1992 to April 2006. Mr. Leer also serves on the board of directors of the Norfolk Southern Corporation, USG Corp., the Business Roundtable, the BRT, the University of the Pacific and Washington University and is past chairman of the Coal Industry Advisory Board. Mr. Leer is a past chairman and continues to serve on the board of directors of the Center for Energy and Economic Development, the National Coal Council and the National Mining Association.
Deck S. Slone	48	Mr. Slone has served as our Vice President Government, Investor and Public Affairs since August 2008. Mr. Slone served as our Vice President Investor Relations and Public Affairs from 2001 to August 2008.
Jeffrey W. Strobel	49	Mr. Strobel has served as our Vice President of Business Development and Strategy since October, 2011. Prior to joining Arch, Mr. Strobel held the following positions: Director of Energy Investment Banking for Wells Fargo Securities, LLC, from 2008 to 2011; Director of Energy Investment Banking for Wachovia Capital Markets, LLC, from 2007 to 2008; and Director, Vice President and Associate for A.G. Edwards Capital Markets from 2000 to 2007.
David N. Warnecke	56	Mr. Warnecke has served as our Senior Vice President Marketing and Trading since March 2011. Mr. Warnecke served as Vice President Marketing and Trading from August 2005 through March 2011, President of our Arch Coal Sales Company, Inc. subsidiary from June 2005 until March 2007, and as Executive Vice President of Arch Coal Sales Company, Inc. from April 2004 until June 2005. Prior to June 2004, Mr. Warnecke was Senior Vice President Sales, Trading and Transportation of Arch Coal Sales Company, Inc.

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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: Vice President Government, Investor and Public Affairs. 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.

Assigned reserves	Recoverable reserves designated for mining by a specific operation.
Btu	A measure of the energy required to raise the temperature of one pound of water one degree of Fahrenheit.
Compliance coal	Coal which, when burned, emits 1.2 pounds or less of sulfur dioxide per million Btus, requiring no blending or other sulfur dioxide reduction technologies in order to comply with the requirements of the Clean Air Act.
Continuous miner	A machine used in underground mining to cut coal from the seam and load it onto conveyors or into shuttle cars in a continuous operation.
Dragline	A large machine used in surface mining to remove the overburden, or layers of earth and rock, covering a coal seam. The dragline has a large bucket, suspended by cables from the end of a long boom, which is able to scoop up large amounts of overburden as it is dragged across the excavation area and redeposit the overburden in another area.
Longwall mining	One of two major underground coal mining methods, generally employing two rotating drums pulled mechanically back and forth across a long face of coal.
Low-sulfur coal	Coal which, when burned, emits 1.6 pounds or less of sulfur dioxide per million Btus.
Preparation plant	A facility used for crushing, sizing and washing coal to remove impurities and to prepare it for use by a particular customer.
Probable reserves	Reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling and measurement are farther apart or are otherwise less adequately spaced.
Proven reserves	Reserves for which (a) quantity is computed from dimensions revealed in outcrops, trenches, workings or drill holes; grade and/or quality are computed from the results of detailed sampling and (b) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well established.
Reclamation	The restoration of land and environmental values to a mining site after the coal is extracted. The process commonly includes "recontouring" or shaping the land to its approximate original appearance, restoring topsoil and planting native grass and ground covers.
Recoverable reserves	The amount of proven and probable reserves that can actually be recovered from the reserve base taking into account all mining and preparation losses involved in producing a saleable product using existing methods and under current law.
Reserves	That part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination.
Room-and-pillar mining	One of two major underground coal mining methods, utilizing continuous miners creating a network of "rooms" within a coal seam, leaving behind "pillars" of coal used to support the roof of a mine.
Unassigned reserves	Recoverable reserves that have not yet been designated for mining by a specific operation.

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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. 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 Operations

Coal prices are subject to change and a substantial or extended decline in prices 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 and demand for coal;

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 air emission standards for coal-fueled power plants and the ability of coal-fueled power plants to meet these standards by installing scrubbers or other means;

adverse weather, climatic or other natural conditions, including natural disasters;

domestic and foreign economic conditions, including economic slowdowns;

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 emission allowances.

A substantial or extended decline in the prices we receive for our future coal sales contracts could materially and adversely affect us by decreasing our profitability and the value of our coal reserves.

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;

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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; 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 67% of the coal volume we sold in 2011, our coal mining operations may be disrupted, 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.

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

We compete with numerous other coal producers in various regions of the United States for domestic sales. International demand for U.S. coal also affects competition within our industry. The demand for U.S. coal exports depends upon a number of factors outside our control, including the overall demand for electricity in foreign markets, currency exchange rates, ocean freight rates, port and shipping capacity, the demand for foreign-priced steel, both in foreign markets and in the U.S. market, general economic conditions in foreign countries, technological developments and environmental and other governmental regulations. Foreign demand for Central Appalachian coal has increased in recent periods. If foreign demand for U.S. coal were to decline, this decline could cause competition among coal producers for the sale of coal in the United States to intensify, potentially resulting in significant downward pressure on domestic coal prices.

In addition, during the mid-1970s and early 1980s, increased demand for coal attracted new investors to the coal industry, spurred the development of new mines and resulted in additional production capacity throughout the industry, all of which led to increased competition and lower coal prices. Increases in coal prices over the past several years have encouraged the development of expanded capacity by coal producers and may continue to do so. Any resulting overcapacity and increased production could materially reduce coal prices and therefore materially reduce our revenues and profitability.

Decreases in demand for electricity resulting from economic, weather changes or other conditions could adversely affect coal prices and materially and adversely affect our results of operations.

Our coal is primarily used as fuel for electricity generation. Overall economic activity and the associated demand for power by industrial users can have significant effects on overall electricity demand. An economic slowdown can significantly slow the growth of electrical demand and could result in contraction of demand for coal. Declines in international prices for coal generally will impact U.S. prices for coal. During the past several years, international demand for coal has been driven, in significant part, by fluctuations in demand due to economic growth in China and India as well as other developing countries. Significant declines in the rates of economic growth in these regions could materially affect international demand for U.S. coal, which may have an adverse effect on U.S. coal prices.

Weather patterns can also greatly affect electricity demand. Extreme temperatures, both hot and cold, cause increased power usage and, therefore, increased generating requirements from all sources. Mild temperatures, on the other hand, result in lower electrical demand, which allows generators to choose the sources of power generation when deciding which generation sources to dispatch. Any downward pressure on coal prices, due to decreases in

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overall demand or otherwise, including changes in weather patterns, would materially and adversely affect our results of operations.

The use of alternative energy sources for power generation could reduce coal consumption by U.S. electric power generators, which could result in lower prices for our coal. Declines in the prices at which we sell our coal could reduce our revenues and materially and adversely affect our business and results of operations.

In 2011, approximately 91% of the tons we sold were to domestic electric power generators. The amount of coal consumed for U.S. electric power generation is affected by, among other things:

the location, availability, quality and price of alternative energy sources for power generation, such as natural gas, fuel oil, nuclear, hydroelectric, wind, biomass and solar power; and

technological developments, including those related to alternative energy sources.

Gas-fueled generation has the potential to displace coal-fueled generation, particularly from older, less efficient coal-powered generators. We expect that many of the new power plants needed 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 generators. In addition, state and federal mandates for increased use of electricity from renewable energy sources could 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 domestic 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 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, and 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. 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.

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

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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; 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 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.

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 depend on the price of scrap steel. We also use significant amounts of diesel fuel and tires for the trucks and other heavy machinery we use, 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.

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.

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Our ability to collect payments from our customers could be impaired if their creditworthiness deteriorates.

We have contracts to supply coal to energy trading and brokering companies under which they purchase the coal for their own account or resell the coal to end users. 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 not be required to deliver coal 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 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. These new 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.

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 and reliability 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, and other events could impair our ability to supply coal to our customers. As we do not have long-term contracts with transportation providers to ensure consistent and reliable service, 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.

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.

We sell a portion of our coal under long-term coal supply agreements, which we define as contracts with terms greater than one year. Under these arrangements, we fix the prices of coal shipped during the initial year and may adjust the prices in later years. As a result, at any given time the market prices for similar-quality coal may exceed

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the prices for coal shipped under these arrangements. Changes in the coal industry may cause some of our customers not to renew, extend or enter into new long-term coal supply agreements with us or to enter into agreements to purchase fewer tons of coal than in the past or on different terms or prices. 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.

Because we sell a portion of our coal production under long-term coal supply agreements, our ability to capitalize on more favorable market prices may be limited. Conversely, at any given time we are subject to fluctuations in market prices for the quantities of coal that we have produced but which we have not committed to sell. As described above under "A substantial or extended decline in coal prices could negatively affect our profitability and the value of our coal reserves," the market prices for coal may be volatile and may depend upon factors beyond our control. Our profitability may be adversely affected if we are unable to sell uncommitted production at favorable prices or at all. For more information about our long-term coal supply agreements, you should see the section entitled "Long-Term Coal Supply Arrangements."

A decline in demand for metallurgical coal would limit our ability to sell our high quality steam coal as higher-priced metallurgical coal 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. A decline 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.

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

For the year ended December 31, 2011, we derived approximately 15% of our total coal revenues from sales to our three largest customers and approximately 37% of our total coal revenues from sales to our ten largest customers. We expect to renew, extend or enter into new long-term coal supply agreements with those and other customers. However, we may be unsuccessful in obtaining long-term coal supply agreements with those customers, and those customers may 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 as the terms under our current long-term coal supply agreements, our profitability could suffer significantly. We have limited protection during adverse economic conditions and may face economic penalties if we are unable to satisfy certain quality specifications under our long-term coal supply agreements.

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.

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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.

Federal and state laws require us to obtain surety bonds 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. We may have difficulty procuring or maintaining our surety bonds. Our bond issuers may demand higher fees, additional collateral, including letters of credit or other terms less favorable to us upon those renewals. Because we are required by state and federal law to have these bonds in place before mining can commence or continue, or 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. That failure could result from a variety of factors, including lack of availability, higher expense or unfavorable market terms, the exercise by third party surety bond issuers of their right to refuse to renew the surety and restrictions on availability on collateral for current and future third party surety bond issuers under the terms of our financing arrangements.

Our profitability may be adversely affected if we must satisfy certain below-market contracts with coal we purchase on the open market or with coal we produce at our remaining operations.

We have agreed to guarantee Magnum's obligations to supply coal under certain coal sales contracts that we sold to Magnum. In addition, we have agreed to purchase coal from Magnum in order to satisfy our obligations under certain other contracts that have not yet been transferred to Magnum, the longest of which extends to the year 2017. If Magnum cannot supply the coal required under these coal sales contracts, we would be required to purchase coal on the open market or supply coal from our existing operations in order to satisfy our obligations under these contracts. At December 31, 2011, if we had purchased the 10.5 million tons of coal required under these contracts over their duration at market prices then in effect, we would have incurred a loss of approximately \$214.7 million.

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.

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

Within the past year we opened offices in 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.

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We may not be able to fully integrate the operations of ICG into our existing operations.

We believe that the acquisition of ICG will result in various benefits or synergies, including, among other things, cost savings and operating efficiencies. Achieving the anticipated benefits of the merger is subject to a number of uncertainties, including whether the businesses of Arch Coal and ICG can be integrated in an efficient and effective manner. In addition, the combined company may experience unanticipated issues, expenses and liabilities.

It is possible that the integration process could take longer than anticipated or cost more than anticipated and could result in the loss of valuable employees, the disruption of each company's ongoing businesses, processes and systems or inconsistencies in standards, controls, procedures, practices, policies and compensation arrangements, any of which could adversely affect our ability to achieve the anticipated benefits and synergies of the merger. The integration process is subject to a number of uncertainties, and no assurance can be given that the anticipated benefits will be realized or, if realized, the timing or cost of their realization. Failure to achieve these anticipated benefits could result in increased costs or decreases in the amount of expected revenues and could adversely affect our future business, financial condition, operating results and prospects, and may cause the combined company's stock price to decline.

Risks Related to our Indebtedness

The amount of indebtedness we have incurred could significantly affect our business.

At December 31, 2011, we had consolidated indebtedness of approximately \$4.0 billion. We also have significant lease and royalty obligations. Our ability to satisfy our debt, lease and royalty obligations, and our ability to refinance our indebtedness, will depend upon our future operating performance. Our ability to satisfy our financial obligations may be adversely affected if we incur additional indebtedness in the future. In addition, the amount of indebtedness we have incurred could have significant consequences to us, such as:

limiting our ability to obtain additional financing to fund growth, such as new LBA acquisitions or other mergers and acquisitions, working capital, capital expenditures, debt service requirements or other cash requirements

exposing us to the risk of increased interest costs if the underlying interest rates rise;

limiting our ability to invest operating cash flow in our business due to existing debt service requirements;

making it more difficult to obtain surety bonds, letters of credit or other financing, particularly during weak credit markets;

causing a decline in our credit ratings;

limiting our ability to compete with companies that are not as leveraged and that may be better positioned to withstand economic downturns;

limiting our ability to acquire new coal reserves and/or plant and equipment needed to conduct operations; and

limiting our flexibility in planning for, or reacting to, and increasing our vulnerability to, changes in our business, the industry in which we compete and general economic and market conditions.

If we further increase our indebtedness, the related risks that we now face, including those described above, could intensify. In addition to the principal repayments on our outstanding debt, we have other demands on our cash resources, including capital expenditures and operating expenses. Our ability to pay our debt depends upon our operating performance. In particular, economic conditions could cause our revenues to decline, and hamper our ability to repay our indebtedness. If we do not have enough cash to satisfy our debt service obligations, we may be

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required to refinance all or part of our debt, sell assets or reduce our spending. We may not be able to, at any given time, refinance our debt or sell assets on terms acceptable to us or at all.

A failure of a financial institution to fulfill their commitments under our credit facility could adversely affect our business.

As of December 31, 2011, we had borrowings of \$375 million under our \$2 billion dollar revolving credit facility. This facility is provided by a syndicate of financial institutions, with each institution agreeing severally (and not jointly) to make revolving credit loans to us in accordance with the terms of the credit agreement. In the event one or more of these financial institutions were to default on their obligation to fund their respective portion of the commitment under the credit agreement, the portion of the facility provided by such defaulting financial institution would not be available to us and would result in a decrease in our available borrowing capacity under our credit agreement.

We may be unable to comply with restrictions imposed by our credit facilities 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 incur additional debt and require us to maintain various financial ratios and comply with various other financial covenants. Our ability to comply with these restrictions may be affected by events beyond our control. A failure to comply with these restrictions could adversely affect our ability to borrow under our credit facilities or result in an event of default under these agreements. In the event of a default, our lenders and the counterparties to our other financing arrangements could terminate their commitments to us and declare all amounts borrowed, together with accrued interest and fees, immediately due and payable. If this were to occur, we might not be able to pay these amounts, or we might be forced to seek an amendment to our financing arrangements which could make the terms of these arrangements more onerous for us. As a result, a default under one or more of our existing or future financing arrangements could have significant consequences for us. For more information about some of the restrictions contained in our credit facilities, leases and other financial arrangements, you should see the section entitled "Liquidity and Capital Resources."

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, carbon 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. In addition, concerted conservation efforts that result in reduced electricity consumption could cause coal prices and sales of our coal to materially decline.

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

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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. The EIA's expectations for the coal industry assume there will be a significant number of as yet unplanned coal-fired plants built in the future which may not occur. 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 "Environmental and Other Regulatory Matters" for more information about the various governmental regulations affecting us.

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 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;

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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" for more information about the various governmental regulations affecting us.

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

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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.

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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 clean up 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 may acquire. Our liability for such claims may be joint and several, 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 have been known to fail, releasing 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 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. 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 one of them thereafter was 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.

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. Certain recent developments particularly may cause changes in the legal and regulatory environment in which we operate and may impact our results or increase our costs or liabilities. Such legal and regulatory environment changes may include changes in: the processes for obtaining or renewing permits; costs associated with providing healthcare benefits to employees; health and safety standards; accounting standards; taxation requirements; and competition laws.

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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. EPA's guidance is subject to several pending legal challenges related to its legal effect and sufficiency including consolidated challenges pending in Federal District Court in 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 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 maintain 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.

ITEM 2. PROPERTIES.

Our Properties

General

At December 31, 2011, we owned or controlled primarily through long-term leases approximately 32,135 acres of coal land in Ohio, 25,037 acres of coal land in Maryland, 33,238 acres of coal land in Virginia, 371,071 acres of coal land in West Virginia, 105,667 acres of coal land in Wyoming, 242,390 acres of coal land in Illinois, 62,822 acres of coal land in Utah, 234,401 acres of coal land in Kentucky, 19,267 acres of coal land in Montana, 21,802 acres of coal land in New Mexico, 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, and Texas. We lease approximately 123,505 acres of our coal land from the federal government and approximately 36,295 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.

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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 occupy approximately 92,900 square feet of leased 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 5.33 billion tons of proven and probable recoverable reserves at December 31, 2011. This does not include an estimated 222 million tons of coal reserves in the South Hilight tract in Wyoming, for which we were awarded a federal coal lease in December 2011 but which has not yet been finalized. Our coal reserve estimates at December 31, 2011 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 under the heading "Risk Factors."

The following tables present our estimated assigned and unassigned recoverable coal reserves at December 31, 2011:

Total Assigned Reserves (Tons in millions)

	Total Assigned Recoverable Reserves		Sulfur Content				As Received Btus per lb.⁽¹⁾	Reserve Control		Mining Method	Past Reserve Estimates⁽²⁾		
			(lbs. per million Btus)			Under-							
			Proven	Probable	<1.2								1.2-2.5
Wyoming	1,474	1,454	20	1,396	78	8,837	1,474	1,474		1,733	1,605		
Montana													
Utah	79	50	29	71	7	11,405	78	1	79	105	84		
Colorado	88	76	12	88		11,374	88		88	75	64		
Central App.	308	262	46	92	177	12,778	277	31	133	175	167		
Northern App.	238	115	123		215	23	45	193	14	224			
Illinois	30	17	13			30	10,808	26	4	30			
Total	2,217	1,974	243	1,647	477	93	10,058	1,988	229	1,621	596	2,080	1,928

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

(2) Past Reserve Estimates does not include former ICG operations acquired on June 15, 2011.

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(Tons in millions)**

	Sulfur Content						As Received Btus per lb.⁽¹⁾	Reserve Control		Mining Method	
	Total Unassigned Recoverable Reserves			(lbs. per million Btus)				Leased	Owned	Surface	Under- ground
	Proven	Probable	<1.2	1.2-2.5	>2.5						
Wyoming	494	410	84	442	52	9,637	384	110	319	175	
Montana	1,353	1,041	312	1,353		8,575	1,353		1,353		
Utah	38	20	18	34	4	11,024	37	1		38	
Colorado	23	18	5	23		11,347	23			23	
Central App.	320	187	133	96	167	12,988	259	61	50	270	
Northern App.	198	95	103	2	92	104	47	151	6	192	
Illinois	692	336	356		692	10,960	73	619	2	690	
Total	3,118	2,107	1,011	1,950	315	853	10,046	2,176	942	1,730	1,388

(1)

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

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 67.4% consist of compliance coal, or coal which emits 1.2 pounds or less of sulfur dioxide per million Btus upon combustion, while an additional 5.2% 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, 2011 was \$5.7 billion, consisting of \$108.6 million of prepaid royalties and a net book value of coal lands and mineral rights of \$5.6 billion.

Reserve Acquisition Process

We acquire a significant portion of the coal we control in the western United States through 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 two to five 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 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

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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."

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.

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 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 under the heading "Risk Factors" for more information.

At December 31, 2011, approximately 21.9% 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

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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 40,911 acres of property to other coal operators in 2011. We received royalty income of \$8.2 million in 2011 from the mining of approximately 2.9 million tons, \$4.1 million in 2010 from the mining of approximately 1.8 million tons, and \$6.3 million in 2009 from the mining of approximately 2.2 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.

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.

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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 (the "EPA") proposed action to deny Mingo Logan the right to use its Corps' permit (as discussed below). The stay currently remains in effect.

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 has been 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" currently pending in federal court in Washington, DC (as described below).

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

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to that motion. The court has been notified of the "Final Determination" and on February 23, 2011 entered a scheduling order for summary disposition of the case.

Summary judgment motions by both parties have been fully briefed. On November 30, 2011, the court heard arguments from the parties limited only to the threshold 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. The case has been submitted on the limited, threshold issue and is pending before the court.

Clean Water Act Request for Information

In January 2008, we received a request from the EPA for certain information related to compliance with effluent limitations and water quality standards under Section 308 of the Clean Water Act applicable to our eastern mining complexes located in West Virginia, Virginia and Kentucky. The request focuses on our compliance with water quality standards and effluent limitations at numerous outfalls as identified in the various NPDES permits applicable to our eastern mining complexes for the period beginning on January 1, 2003 through January 1, 2008. The compliance reporting mechanism is contained in Discharge Monitoring Reports which are required to be prepared and submitted quarterly to state environmental agencies and contain detailed monthly compliance data. In July 2008, the EPA referred the request to the U.S. Department of Justice. We negotiated a compromise with the Department of Justice, the EPA, the West Virginia Department of Environmental Protection and Kentucky Energy and Environment Cabinet to fully and finally resolve the issues identified in the EPA's Section 308 Request for Information. The compromise is contained in a consent decree which includes certain elements of injunctive relief and a penalty in the amount of \$4 million. By Memorandum Opinion and Order dated November 7, 2011, the U.S. District Court for the Southern District of West Virginia approved and entered the consent decree.

Sago Mine Litigation Matters

On August 23, 2006, a survivor of the Sago mine accident, Randal McCloy, filed a complaint in the Kanawha Circuit Court in Kanawha County, West Virginia. The claims brought by Randal McCloy and his family against ICG and certain of its subsidiaries, and against W.L. Ross & Co., and Wilbur L. Ross, Jr., individually, were dismissed on February 14, 2008, after the parties reached a confidential settlement. Sixteen other complaints were filed in Kanawha Circuit Court by the representatives of many of the miners who died in the Sago mine accident, and several of these plaintiffs filed amended complaints to expand the group of defendants in the cases. The complaints alleged various causes of action against ICG and its subsidiary, Wolf Run Mining Company, one of its shareholders, W.L. Ross & Co., and Wilbur L. Ross, Jr., individually, related to the accident and seek compensatory and punitive damages. In addition, the plaintiffs also alleged causes of action against other third parties, including claims against the manufacturer of Omega block seals used to seal the area where the explosion occurred and against the manufacturer of self-contained self-rescuer ("SCSR") devices worn by the miners at the Sago mine. Some of these third parties have been dismissed from the actions upon settlement. The amended complaints added other of ICG's subsidiaries to the cases, including ICG, Inc., ICG, LLC and Hunter Ridge Coal Company, unnamed parent, subsidiary and affiliate companies of ICG, W.L. Ross & Co., and Wilbur L. Ross, Jr., and other third parties, including a provider of electrical services and a supplier of components used in the SCSR devices. In addition to the dismissal of the McCloy claim, ICG previously settled and dismissed five other actions. These settlements required the release of ICG, its subsidiaries, W.L. Ross & Co., and Wilbur L. Ross, Jr. The court scheduled the matter for trial on all remaining claims and ordered the parties to mediate. The parties reached a confidential settlement on all remaining claims after engaging in mediation and the Court approved the settlement.

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Allegheny Energy Contract Matter

Allegheny Energy Supply ("Allegheny"), the sole customer of coal produced at our 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. 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. Wolf Run and Hunter Ridge have filed an appeal bond in the amount of \$124.9 million. Briefing is underway and will be completed in early 2012.

Saratoga Class Action Matter

On January 7, 2008, Saratoga Advantage Trust ("Saratoga") filed a class action lawsuit in the U.S. District Court for the Southern District of West Virginia against ICG and certain of its officers and directors seeking unspecified damages. The complaint asserts claims under Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and Rule 10b-5 promulgated thereunder, based on alleged false and misleading statements in the registration statements filed in connection with ICG's November 2005 reorganization and December 2005 public offering of

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common stock. In addition, the complaint challenges other of ICG's public statements regarding its operating condition and safety record. On July 6, 2009, Saratoga filed an amended complaint asserting essentially the same claims but seeking to add an individual co-plaintiff. ICG has filed a motion to dismiss the amended complaint. In June 2011, ICG agreed to settle this matter for a total of \$1.375 million. On August 1, 2011, the court issued its order preliminarily approving settlement and conducted a settlement fairness hearing on November 14, 2011. The matter is pending Court approval.

ICG Eastern

On June 11, 2010, the West Virginia Department of Environmental Protection ("WVDEP") filed suit against ICG Eastern, LLC ("ICG Eastern") alleging violations of the West Virginia Water Pollution Control/National Pollutant Discharge Elimination System ("WVNPDES") and Surface Mine Permits for ICG Eastern's Birch River surface mine. The WVDEP alleges that ICG Eastern has failed to fully comply with the effluent limits for aluminum, manganese, pH, iron and selenium contained in its WVNPDES permit. The complaint further alleges that violations of the WVNPDES permit effluent limits have caused violations of water quality standards for the same parameters in the streams receiving the discharges from this mine. The WVDEP also alleges that violations of the effluent limits in the WVNPDES permits are also violations of the regulations governing surface mining in West Virginia. ICG Eastern and the WVDEP executed a settlement agreement that will require ICG Eastern to pay a monetary penalty of \$0.2 million and accept the imposition of a compliance schedule related to selenium and other water quality parameters. The settlement agreement was submitted to the Webster County Circuit Court on December 30, 2010, was made available for public comment by the WVDEP and was thereafter entered by the court on April 18, 2011. The settlement agreement resolves all of the WVDEP's claims in the suit. In a supplemental consent decree, WVDEP and ICG negotiated and agreed to a resolution related to certain alleged selenium effluent limit violations beginning after April 5, 2010 which were reserved from the original consent decree due to both administrative appeal board and state circuit court stays. The court approved and entered the supplemental consent decree by order dated November 4, 2011 and filed November 7, 2011.

ICG Hazard

The Sierra Club, on December 3, 2010, filed a Notice of Intent ("NOI") to sue ICG Hazard, LLC ("Hazard") alleging violations of the Clean Water Act and the Surface Mining Control and Reclamation Act of 1977 at Hazard's Thunder Ridge surface mine. The NOI, which was supplemented by a revised filing on February 24, 2011, claims that Hazard is discharging selenium and contributing to conductivity levels in the receiving streams in violation of state and federal regulations. On May 24, 2011, the Sierra Club sued Hazard in U.S. District Court for the Eastern District of Kentucky under the Citizens Suit provisions of the Clean Water Act and the Surface Mining Control and Reclamation Act seeking civil penalties, injunctive relief and attorneys' fees.

Kentucky Energy and Environment Cabinet

On December 3, 2010, the Kentucky Energy and Environment Cabinet ("Cabinet") filed suit against Hazard, ICG Knott County, LLC, ICG East Kentucky, LLC and Powell Mountain Energy, LLC (collectively, "KY Operations") alleging that the KY Operations failed to comply with the terms and conditions of the Kentucky Pollutant Discharge Elimination System ("KPDES") permits issued by the Cabinet's Division of Water to the KY Operations. Among the claims lodged by the Cabinet were allegations that contract water monitoring laboratories retained by the KY Operations did not adhere to the practices and procedures required for conducting KPDES monitoring, the contract laboratories failed to properly document and maintain records of the monitoring and the KY Operations submitted quarterly Discharge Monitoring Reports that sometimes contained inaccurate, incomplete and erroneous information. The KY Operations and the Cabinet entered a proposed Consent Judgment contemporaneously with the filing of the complaint that, if approved by the Franklin County (KY) Circuit Court, will require the KY Operations to pay a monetary penalty of \$0.4 million, to prepare and implement a Corrective Action Plan that corrects the deficiencies in the respective KPDES monitoring programs, to identify the responsible

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corporate officers for each KPDES permit and to provide specific detailed information in support of the Discharge Monitoring Reports to be filed for the fourth quarter 2010 and first quarter 2011. Final resolution of this matter is pending approval by the court. On February 11, 2011, the court entered an order allowing certain anti-mining groups to intervene in the action to contest the validity of the Consent Judgment. The hearing on the entry of the Consent Judgment was held beginning August 30, 2011 and the matter is pending a decision from the court.

By letter dated June 28, 2011, Appalachian Voices, Inc., Waterkeeper Alliance, Inc., Kentuckians for the Commonwealth, Inc., Kentucky Riverkeeper, Inc., Ms. Pat Banks, Ms. Lanny Evans, Mr. Thomas H. Bonny, and Mr. Winston Merrill Combs (collectively, "Appalachian Voices") filed a NOI to sue the KY Operations for alleged violations of the Clean Water Act. The NOI claims that ICG has violated and continues to violate effluent standards or limitations under the Clean Water Act in reference to KPDES Coal General Permit. The NOI also alleges a lack of diligent prosecution related to the lawsuit filed by the Kentucky Energy and Environment Cabinet (as referenced and described above). On October 25, 2011, Appalachian Voices sued the KY Operations in U.S. District Court for the Eastern District of Kentucky under the Citizens Suit provisions of the Clean Water Act seeking civil penalties, injunctive relief and attorneys' fees.

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 Pro