

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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2024
OR

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

For the transition period from _____ to _____
Commission file number: 001-38147

Core Natural Resources, Inc.
(Exact name of registrant as specified in its charter)

Delaware **82-1954058**
(State or other jurisdiction of incorporation or organization) (I.R.S. Employer Identification No.)

275 Technology Drive Suite 101
Canonsburg, PA 15317-9565
(724) 416-8300
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

CONSOL Energy Inc.
(Former name or former address, if changed since last report)

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
Common Stock (\$0.01 par value)	CNR	New York Stock Exchange

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

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

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 every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

Large accelerated filer Accelerated filer Non-accelerated filer Smaller Reporting Company Emerging Growth Company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes No

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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

The aggregate value of common stock held by non-affiliates of the registrant (treating all executive officers and directors of the registrant, for this purpose, as if they may be affiliates of the registrant) was approximately \$2,937,936,190 as of June 30, 2024, the last business day of the registrant's most recently completed second fiscal quarter, based on the reported closing price of the common stock as reported on The New York Stock Exchange on such date.

The number of shares outstanding of the registrant's common stock as of January 31, 2025 was 54,016,722 shares.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of Core Natural Resources, Inc.'s Proxy Statement for the 2025 Annual Meeting of Stockholders to be filed within 120 days of the end of the registrant's fiscal year are incorporated by reference in Items 10, 11, 12, 13 and 14 of Part III.

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PART I

Explanatory Note

On January 14, 2025, CONSOL Energy Inc., a Delaware corporation, completed its previously announced all-stock merger of equals transaction (the “Merger”) with Arch Resources, Inc., a Delaware corporation (“Arch”), pursuant to that certain Agreement and Plan of Merger, dated as of August 20, 2024 (the “Merger Agreement”), by and among CONSOL Energy Inc., Mountain Range Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of CONSOL Energy Inc. (“Merger Sub”), and Arch. Pursuant to the terms of the Merger Agreement, Merger Sub merged with and into Arch, with Arch continuing as the surviving corporation and as a wholly-owned subsidiary of the Company. Additionally, pursuant to the Merger Agreement, the Company was renamed “Core Natural Resources, Inc.” and began trading under the ticker symbol “CNR” on January 15, 2025.

Since the Merger occurred subsequent to the end of the reporting period, unless otherwise specifically noted, information set forth herein does not include the information of Arch. Accordingly, unless otherwise specifically noted, references herein to “Core Natural Resources,” “Core,” “we,” “our,” “us,” “our Company” and “the Company” refer only to Core and its subsidiaries prior to the Merger and do not include Arch and its subsidiaries.

Important Definitions Referenced in this Annual Report

- “Core Natural Resources,” “Core,” “we,” “our,” “us,” “our Company” and “the Company” refer to Core Natural Resources, Inc. (formerly known as CONSOL Energy Inc.) and its subsidiaries prior to the Merger (unless otherwise specifically noted herein);
- “Arch” refers to Arch Resources, Inc., a Delaware corporation and a wholly-owned subsidiary of the Company following the Merger;
- “Beckley” refers to the Company's low-vol metallurgical coal mine located in Raleigh County, West Virginia;
- “Black Thunder” refers to the Company's surface mining complex located in Campbell County, Wyoming, consisting of four active pit areas and two active loadout facilities;
- “Btu” refers to one British thermal unit;
- “Coal Creek” refers to the Company's surface mining complex located in Campbell County, Wyoming, consisting of one active pit area and a loadout facility;
- “coal reserves” refer to the Company's proven and probable coal reserves as defined by Section 1300 *et. seq.* of Regulation S-K that could be economically mineable, after taking into account modifying factors, including mining recovery and preparation plant yield;
- “CONSOL Marine Terminal” refers to the Company's terminal operations located in the Port of Baltimore, Maryland;
- “Dominion Terminal” refers to the ground storage-to-vessel coal transloading facility in Newport News, Virginia operated by Dominion Terminal Associates LLP (“DTA”), a limited liability partnership, in which the Company owns a 35% interest;
- “former parent” refers to CNX Resources Corporation and its consolidated subsidiaries;
- “Greenfield Reserves and Resources” refer to those undeveloped reserves and resources owned by the Company in the Northern Appalachian, Central Appalachian and Illinois basins that are not associated with the Pennsylvania Mining Complex or the Itmann Mining Complex;
- “Itmann Mining Complex” refers to the Company's Itmann No. 5 metallurgical coal mine and coal preparation plant located in Wyoming County, West Virginia, and surrounding reserves to be processed and sold through the Itmann Mining Complex coal preparation plant;
- “Leer” refers to Arch's longwall operation located in Taylor County, West Virginia;
- “Leer South” refers to Arch's longwall operation in the Lower Kittanning seam with a preparation plant and a loadout facility located in Barbour County, West Virginia;

- “Merger” refers to the Company's all-stock merger of equals transaction with Arch that closed on January 14, 2025;
- “Merger Agreement” refers to the Agreement and Plan of Merger, dated as of August 20, 2024, by and among CONSOL Energy Inc., Mountain Range Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of CONSOL Energy Inc., and Arch;
- “mmBtu” refers to one million British thermal units;
- “Mountain Laurel” refers to Arch's underground mining complex located in Logan County and Boone County, West Virginia;
- “Pennsylvania Mining Complex” or “PAMC” refers to the Bailey, Enlow Fork and Harvey coal mines, the Central Preparation Plant, and related coal reserves, assets and operations located in southwestern Pennsylvania and northern West Virginia; and
- “West Elk” refers to Arch's mining complex located in Gunnison County, Colorado.

FORWARD-LOOKING STATEMENTS

Certain statements in this Annual Report on Form 10-K are “forward-looking statements” within the meaning of the federal securities laws. With the exception of historical matters, the matters discussed in this Annual Report on Form 10-K are forward-looking statements (as defined in Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) that involve risks and uncertainties that could cause actual results and outcomes to differ materially from results expressed in or implied by our forward-looking statements. Accordingly, investors should not place undue reliance on forward-looking statements as a prediction of actual results. The forward-looking statements may include projections and estimates concerning the timing and success of specific projects and our future production, revenues, income and capital spending. When we use the words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “should,” “will,” “would,” or their negatives, or other similar expressions, the statements which include those words are usually forward-looking statements. When we describe strategy that involves risks or uncertainties, we are making forward-looking statements. The forward-looking statements in this Annual Report on Form 10-K speak only as of the date of this Annual Report on Form 10-K; we disclaim any obligation to update these statements unless required by securities law, and we caution you not to rely on them unduly. We have based these forward-looking statements on our current expectations and assumptions about future events. While our management considers these expectations and assumptions to be reasonable, they are inherently subject to significant business, economic, competitive, regulatory and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond our control. These risks, contingencies and uncertainties relate to, among other matters, the following:

- deterioration in economic conditions (including continued inflation) or changes in consumption patterns of our customers may decrease demand for our products, impair our ability to collect customer receivables and impair our ability to access capital;
- volatility and wide fluctuation in coal prices based upon a number of factors beyond our control;
- an extended decline in the prices we receive for our coal affecting our operating results and cash flows;
- significant downtime of our equipment or inability to obtain equipment, parts or raw materials;
- decreases in the availability of, or increases in the price of, commodities or capital equipment used in our coal mining operations;
- our reliance on major customers, our ability to collect payment from our customers and uncertainty in connection with our customer contracts;
- our inability to acquire additional coal reserves or resources that are economically recoverable;
- alternative steel production technologies that may reduce demand for our coal;
- the availability and reliability of transportation facilities and other systems that deliver our coal to market and fluctuations in transportation costs;
- a loss of our competitive position;
- foreign currency fluctuations that could adversely affect the competitiveness of our coal abroad;
- the risks related to the fact that a significant portion of our production is sold in international markets (and may grow) and our compliance with export control and anti-corruption laws;
- coal users switching to other fuels in order to comply with various environmental standards related to coal combustion emissions;
- the impact of current and future regulations to address climate change, the discharge, disposal and clean-up of hazardous substances and wastes and employee health and safety on our operating costs as well as on the market for coal;
- the risks inherent in coal operations, including being subject to unexpected disruptions caused by adverse geological conditions, equipment failure, delays in moving out longwall equipment, railroad derailments, security breaches or terroristic acts and other hazards, delays in the completion of significant construction or repair of equipment, fires, explosions, seismic activities, accidents and weather conditions;
- failure to obtain or renew surety bonds or insurance coverages on acceptable terms;
- the effects of coordinating our operations with oil and natural gas drillers and distributors operating on our land;
- our inability to obtain financing for capital expenditures on satisfactory terms;
- the effects of our securities being excluded from certain investment funds as a result of environmental, social and corporate governance (“ESG”) practices;
- the effects of global conflicts on commodity prices and supply chains;
- the effect of new or existing laws or regulations or tariffs and other trade measures;
- our inability to find suitable joint venture partners or acquisition targets or integrating the operations of future acquisitions into our operations;
- obtaining, maintaining and renewing governmental permits and approvals for our coal operations;
- the effects of asset retirement obligations, employee-related long-term liabilities and certain other liabilities;
- uncertainties in estimating our economically recoverable coal reserves;
- defects in our chain of title for our undeveloped reserves or failure to acquire additional property to perfect our title to coal rights;

- the outcomes of various legal proceedings, including those which are more fully described herein;
- the risk of our debt agreements, our debt and changes in interest rates affecting our operating results and cash flows;
- information theft, data corruption, operational disruption and/or financial loss resulting from a terrorist attack or cyber incident;
- the potential failure to retain and attract qualified personnel of the Company;
- failure to maintain effective internal controls over financial reporting;
- uncertainty with respect to the Company's common stock, potential stock price volatility and future dilution;
- uncertainty regarding the timing and value of any dividends we may declare;
- uncertainty as to whether we will repurchase shares of our common stock;
- inability of stockholders to bring legal action against us in any forum other than the state courts of Delaware;
- the risk that the businesses of the Company and Arch will not be integrated successfully after the closing of the Merger;
- the risk that the anticipated benefits of the Merger may not be realized or may take longer to realize than expected; and
- other unforeseen factors.

The above list of factors is not exhaustive or necessarily in order of importance. Additional information concerning factors that could cause actual results to differ materially from those in forward-looking statements include those discussed under "*Risk Factors*" elsewhere in this report. The Company disclaims any intention or obligation to update publicly any forward-looking statements, whether in response to new information, future events, or otherwise, except as required by applicable law.

ITEM 1. Business

General

We are a world-class producer and exporter of high-quality, low-cost coals, including metallurgical and thermal coals. With a focus on seaborne markets, we play an essential role in meeting the world's growing need for steel, infrastructure and energy, and have ownership interests in two marine export terminals.

We and our predecessors have been mining coal, primarily in the Appalachian Basin, since 1864. The Company was incorporated in Delaware on June 21, 2017 and became an independent, publicly-traded company on November 28, 2017 when our former parent separated its coal business and natural gas business into two independently traded public companies.

On January 14, 2025, Core Natural Resources, Inc. (formerly known as CONSOL Energy Inc.), a Delaware corporation, completed its previously announced all-stock merger of equals transaction with Arch pursuant to the Merger Agreement. Additionally, pursuant to the Merger Agreement, the Company was renamed "Core Natural Resources, Inc." and began trading under the ticker symbol "CNR" on January 15, 2025.

The address of our principal executive offices is 275 Technology Drive, Suite 101, Canonsburg, Pennsylvania 15317. We maintain a website at <http://www.corenaturalresources.com/>. The information contained in or connected to the website will not be deemed to be incorporated in this document, and you should not rely on any such information in making an investment decision.

All dollar amounts discussed in this section are in millions of U.S. dollars, except for per share amounts, and unless otherwise indicated.

Our Mission

The Company's mission is to become the world's leading provider of essential coal-based natural resources in support of human progress. We are committed to providing essential coal-based products necessary for infrastructure development, urbanization, transportation and reliable and affordable power generation. In doing so, we enable global prosperity and enhance the quality of life for people around the world. We are dedicated to the responsible utilization of vital natural resources. In doing so, we are committed to safe and sustainable practices that aim to reduce our environmental footprint, enhance our operations and create opportunities for our business and stakeholders. Our values of safety, sustainability, and continuous improvement are the foundation of the Company's identity and are the basis for how management defines continued success. We believe the Company's rich resource base, coupled with these values, will allow management to create value for the long-term. We believe that the use of coal in industrial applications, including but not limited to the steel-making process, and as a fuel source for electricity will continue for many years.

Our Strategy

Following the Merger, the Company's near-term strategy is focused on promptly and effectively integrating historic Arch with CONSOL Energy's business, assets and employees. The integration is expected to deliver future annual cost savings and synergies to the Company and its stockholders.

At the same time, the Company continues to be focused on driving long-term value for its stakeholders and maximizing cash flow generation through the safe, compliant and efficient operation of our business, while maintaining a strong balance sheet and liquidity, returning capital through share buybacks and/or dividends and, when prudent, allocating capital toward compelling growth and diversification opportunities.

The Merger furthers this vision by combining best-in-sector metallurgical and thermal coal operating platforms anchored by high-quality, low-cost, long-lived longwall coal-mining assets. Following the Merger, the Company has broad and diverse assets that produce coal with qualities and blends capable of serving multiple growth markets and geographies. In addition, the Company has strong North American logistics and export capabilities through ownership interests in two East Coast terminals and longstanding relationships with West Coast and Gulf Coast ports. The Company believes that the Merger will provide ongoing cash generation through a strong contracted thermal coal position from the PAMC coupled with meaningful opportunities through Arch's metallurgical coal platform. Through this, the Company has the potential to return significant capital to stockholders while simultaneously making strategic investments in innovation and growth.

Opportunistically grow our presence in the industrial and metallurgical markets, while preserving coal sales to rail-served power plants in strategic market areas

We plan to minimize our market risk and maximize realizations by continuing to focus on placing a growing portion of our production in the export markets, where we sell to industrial, metallurgical and power generation end-users. This approach provides us pricing upside when markets are strong and with volume stability when markets are weak.

Prior to the Merger, approximately 57% of the Company's 2024 sales tons were sold to export markets and 43% were sold to domestic customers. Of the 2024 sales tons, 49% were sold in the electric power generation market, 33% were sold in the industrial market and 18% were sold in the metallurgical market. Through the Merger, we spring-boarded our plan to minimize market risk and maximize realizations via the combination of complementary coal types and increased access to the seaborne markets. Following the Merger, the Company has broad and diverse assets that produce coal with qualities and blends capable of serving multiple growth markets and geographies. In addition, the Company has strong North American logistics and export capabilities through ownership interests in two East Coast terminals and longstanding relationships with West Coast and Gulf Coast ports. The Company believes that the Merger will provide ongoing cash generation through a strong contracted thermal coal position from the PAMC coupled with meaningful opportunities through Arch's metallurgical coal platform.

Drive operational excellence through safety, compliance, and continuous improvement

We continue to focus on our values of safety, sustainability and continuous improvement. Historically, the PAMC has been one of the most productive, lowest-cost underground mines in the coal industry, while simultaneously setting some of the industry's highest standards for safety and compliance. Over the past five years, our PAMC Mine Safety and Health Administration ("MSHA") total reportable incident rate was approximately 53% lower than the national average underground bituminous coal mine incident rate. Furthermore, the PAMC MSHA significant and substantial ("S&S") citation rate per 100 inspection hours was approximately 79% lower than the industry's average MSHA S&S citation rate over the twelve-month period ended December 31, 2024. Prior to the Merger, Arch was also viewed as a demonstrated leader in mine safety, with an average lost-time incident rate during the past five years that was more than 2.5 times better than the industry average.

We believe that our focus on safety and compliance promotes greater reliability in our operations, which fosters long-term customer relationships and lower operating costs that support higher margins. Consistent with our core value of continuous improvement, productivity at the PAMC has improved from 6.27 tons per employee hour in 2015 to 7.34 tons per employee hour in 2024. We intend to continue to grow the economic competitiveness of our operations by proactively identifying, pursuing and implementing efficiency improvements and new technologies that can drive down unit costs without compromising safety or compliance.

Preserve and Increase Cash Generation

The Company has generated significant cash from operations since becoming a publicly-traded company. We believe that the Merger further positions the Company to continue to generate significant cash from operations across a range of market environments through the combination of revenue from contracted thermal coal production and sales coupled with a strong metallurgical coal platform.

Maintain Liquidity and Ability to Access Capital Markets

We constantly seek to improve our capital market capacity to provide additional funds, if needed, to grow our business. We believe that our Company can access capital markets to raise debt and equity financing from time to time depending on the market conditions.

The Company and Arch historically have successfully accessed the municipal bond markets, and the Company expects to continue to be able to access these markets following the Merger.

In addition, on January 14, 2025, and in connection with the Merger, the Company entered into an amendment to its existing revolving credit facility. The amendment increases the available revolving commitments from \$355 million to \$600 million and extends the maturity date of the facility to April 30, 2029. The revolving credit facility now includes participation from 22 banks, including nine new lenders, and 37% of the total commitments come from new lenders, while 63% are from existing lenders. Additionally, the Company reduced the annual interest rate by 75 bps while further enhancing financial flexibility.

Also, on January 14, 2025, and in connection with the Merger, a subsidiary of Arch, Arch Receivable Company, LLC, as seller, and another subsidiary of Arch, Arch Coal Sales Company, Inc., as initial servicer, amended Arch's receivables purchase agreement, which supports the issuance of letters of credit and requests for cash advances. The amendment permits the receivables purchase agreement to remain outstanding following consummation of the Merger, including by amending the change of control provisions thereunder.

Selectively grow our business to maximize stockholder value by capitalizing on synergies with our assets and expertise

We plan to judiciously direct the cash generated by our operations toward those opportunities that present the greatest potential for value creation to our stockholders, particularly those that take advantage of synergies with our asset base and/or the expertise of our management team. To that end, we intend to regularly and rigorously evaluate opportunities both for organic growth and for acquisitions, joint ventures and other business arrangements that complement our operations. For example, we are actively engaged in continuous improvement or research and development projects to improve the productivity of our mining operations through the use of technology, automation, data visualization and analytics.

Our management team has extensive experience in developing, operating and marketing a wide variety of coal assets and, we believe, is well qualified to evaluate organic and external growth opportunities. We plan to carefully weigh any capital investment decisions against alternate uses of the cash to help ensure we are delivering the most value to our stockholders.

We are also pursuing a variety of alternative and innovative uses of coal to diversify our business. These activities are led by CONSOL Innovations LLC, our wholly-owned subsidiary with operations located in Triadelphia, WV, which is focused on creating long-term growth and diversification opportunities through sustainable innovations in the carbon products and materials and carbon management markets. For example, in 2022, we acquired the remaining equity stake in CFOAM Corp. ("CFOAM"), which manufactures high-performance carbon foam products from coal that can be used in the aerospace, military, industrial and commercial product markets. In 2023, we acquired the assets of Touchstone Advanced Composites ("TAC"), an innovative composite tooling supplier for the aerospace industry that uses our CFOAM product. Also in 2023, we expanded our research and development activities that are focused on using coal and coal mining/preparation plant waste streams for battery applications, including the development of battery electrode materials. In 2024, we installed approximately 2,500 linear feet of our coal plastic composite decking product across several applications and entered aerospace parts manufacturing with the sale of our first TAC-manufactured parts. Additionally, two projects supported by our Innovations team were included on Time Magazine's list of the 200 best inventions of 2024.

We also continue to partner with Ohio University, the U.S. Department of Energy and certain other industry partners on several projects to develop coal-derived materials that can potentially be used in applications such as engineered composite building materials and three-dimensional printing. Another initiative, our 21st Century Power Plant project, is also receiving funding from the Department of Energy to evaluate a next-generation power plant that would be fueled by waste coal and biomass and equipped with carbon dioxide (CO₂) capture and storage to achieve net neutral or negative CO₂ emissions. In addition, our Department of Energy-sponsored REMEDY project seeks to develop an efficient, safe and cost-effective technology for mitigation of mine ventilation air methane that, if successful, could have broader market applicability.

From time to time, we also evaluate investments in industries and sectors that are not related to coal but may provide long-term business opportunities that develop due to the potential energy transition efforts of various local, federal and international governments.

Our Competitive Strengths

We believe we are well-positioned to successfully execute our business strategies because of the following competitive strengths:

Focus on free cash flow generation supported by strong margins and optimized production levels

We intend to continue our focus on maintaining high margins by optimizing production from our high-quality reserves and leveraging our extensive logistics infrastructure and broad market reach. Following the Merger, the Company has broad and diverse assets that produce coal with qualities and blends capable of serving multiple growth markets and geographies. Following the Merger, the Company has strong North American logistics and export capabilities through ownership interests in two East Coast terminals and longstanding relationships with West Coast and Gulf Coast ports. The Company believes that the Merger will provide ongoing cash generation through a strong contracted thermal coal position from the PAMC coupled with meaningful opportunities through Arch's metallurgical coal platform.

For example, the PAMC's low-cost structure, high-quality product, favorable access to rail and port infrastructure and diverse base of end-use customers allow it to move large volumes of coal at positive cash margins throughout a variety of market conditions. Additionally, the Leer franchise consistently ranks among the lowest cost U.S. metallurgical mines and produces a product quality that is recognized and sought-after worldwide. The Leer and Leer South operations are complemented by the Beckley and Mountain Laurel continuous miner mines, which in aggregate provide us with a full suite of high-quality metallurgical products for sale into the global metallurgical market. Additionally, the location of Arch's mines enables us to ship coal to most of the major coal-fueled power plants in the United States. Furthermore, our ability to enter into multi-year contracts with our longstanding customer base, as well as strategic industrial export customers, will enhance our ability to generate high margins in varied commodity price environments.

Extensive, High-Quality Reserve Base

The PAMC has extensive high-quality reserves of bituminous coal. We mine our reserves from the Pittsburgh No. 8 Coal Seam, which is a large contiguous formation of high-Btu coal that is ideal for high-productivity, low-cost longwall operations. As of December 31, 2024, the PAMC included 557.6 million tons of recoverable coal reserves that are sufficient to support approximately 20 years of full-capacity production. The advantageous qualities of our coal enable us to compete for demand from a broader range of the global industrial and power generation markets. In addition to the substantial reserve base associated with the PAMC, our Itmann Mining Complex includes 27.5 million tons of recoverable coal reserves that are sufficient to support more than 30 years of full-capacity production, and our 1.3 billion tons of Greenfield Reserves and Resources in the Northern Appalachian Basin ("NAPP"), the Central Appalachian Basin ("CAPP") and the Illinois Basin ("ILB") feature both thermal and metallurgical reserves and resources and provide additional optionality for organic growth or monetization as market conditions allow.

World-Class, Well-Capitalized, Low-Cost Longwall Mining Complexes

Based on production per employee, the PAMC is a productive and efficient coal mining complex in NAPP, averaging 7.37 tons of coal production per employee hour for the past two years. We believe our substantial capital investment in the PAMC will enable us to maintain high production volumes, low operating costs and a strong safety and environmental compliance record, which we believe are key to supporting stable financial performance and cash flows throughout business and commodity price cycles.

Additionally, the Leer and Leer South longwall mines that we acquired through the Merger anchor our large-scale, first quartile metallurgical franchise. The Leer franchise consistently ranks among the lowest cost U.S. metallurgical mines and produces a product quality that is recognized and sought-after worldwide.

Strategically Located Mining Operations with Advanced Distribution Capabilities and Excellent Access to Key Logistics Infrastructure

Our logistics infrastructure and proximity to coal-fired power plants in the eastern United States provides us with operational and marketing flexibility, reduces the cost to deliver coal to our core markets and allows us to realize higher free-on-board ("FOB") mine prices. We believe that we have a significant transportation cost advantage compared to many of our competitors, particularly producers in the ILB and the Powder River Basin ("PRB"), for deliveries to customers in our core markets and to East Coast ports for international shipping. For example, based on publicly available data and internal estimates, we believe that the transportation cost advantage from our mines compared to ILB mines (not accounting for Btu differences) is approximately \$5 to \$8 per ton for coal delivered to foreign consumers in Europe and India, and an even more pronounced cost advantage for coal delivered to domestic customers in the mid-Atlantic states. Our ability to accommodate multiple unit trains from both Norfolk Southern Corporation ("Norfolk Southern") and CSX Transportation Inc. ("CSX") at the Central Preparation Plant, which includes a dual-batch loadout facility capable of loading up to 9,000 tons of clean coal per hour and 19.3 miles of track with three sidings, allows for the seamless transition of locomotives from empty inbound trains to fully loaded outbound trains at our facility. Furthermore, the PAMC has exceptional access to export infrastructure in the United States. Through our 100%-owned CONSOL Marine Terminal, served by both the Norfolk Southern and CSX railroads, the PAMC and the Itmann Mining Complex have a competitive advantage in the world's seaborne coal markets. As a result of the Merger, we now have access to a second East Coast terminal, which provides opportunistic flexibility for all of Core's eastern operations, including the Leer, Leer South, Beckley and Mountain Laurel mines, to further enhance our competitive advantage in the world's seaborne coal markets.

Strong, Well-Established Customer Base Supporting Contractual Volumes

We have a well-established and diverse customer base, comprised of export industrial customers, metallurgical end-users and domestic electric-power-producing companies. We have had success entering into multi-year coal sales agreements with our customers due to our longstanding relationships, reliability of production and delivery, competitive pricing and high coal quality. Approximately 92% of our sales in 2024 were to customer companies that were in our 2023 portfolio, and six of our top domestic power plant customers in 2024 (which are included in the ten plants to which we shipped approximately 500,000 tons or more of PAMC coal in 2024) have been in our portfolio for at least five consecutive years. In addition, to mitigate our exposure to coal-fired power plant retirements, we have strategically developed our customer base to include power plants that are economically positioned to continue operating for the foreseeable future and that are equipped with state-of-the-art environmental controls.

We also have a growing international customer base due to favorable access to seaborne coal markets and our strong relationships with leading coal trading, brokering and international coal end-users. We have grown our exports of coal to the seaborne markets from 8.3 million tons (or approximately 32% of our annual sales volume) in 2017 to 15.9 million tons (or approximately 57% of our annual sales volume) in 2024, including sales from both the PAMC and the Itmann Mining Complex.

Similarly, prior to the Merger, Arch marketed its metallurgical and thermal coal to domestic and foreign steel producers, domestic and foreign power generators, and other industrial facilities. For the year ended December 31, 2024, Arch derived approximately 16% of its total coal revenues from sales to its three largest customers. Additionally, in 2024, Arch sold coal to domestic customers located in 25 different states as the location of its mines enabled it to ship coal to most of the major coal-fueled power plants in the United States and exported coal to Europe, Asia, Central and South America, and Africa.

Highly Experienced Management Team and Operating Team

The Company is being led by a proven and highly experienced management team that reflects the strengths and capabilities of both companies. Our management team is overseen by an experienced, diverse and majority-independent board of directors, comprised of eight directors – four former directors of the Company board immediately prior to the Merger and four former directors of the Arch board immediately prior to the Merger. Our management and operating teams have (i) significant expertise owning, developing and managing complex thermal and metallurgical coal mining operations, (ii) valuable relationships with customers, railroads and other participants across the coal industry, (iii) technical wherewithal and demonstrated success in developing new applications and customers for our coal products in industrial, metallurgical and power generation markets, and (iv) a proven track record of successfully financing, building, enhancing and managing coal assets in a reliable and cost-effective manner throughout all parts of the commodity cycle. We intend to leverage these qualities to continue to successfully develop our coal mining assets while efficiently and flexibly managing our operations to maximize operating cash flow and innovating to create long-term growth and diversification opportunities.

Principal Properties

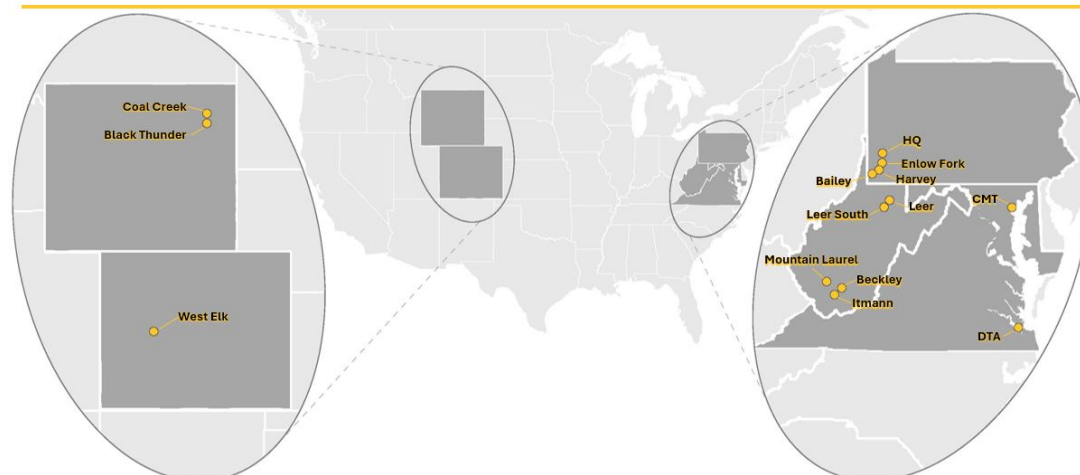
Prior to the Merger, our most significant tangible assets were the PAMC and the CONSOL Marine Terminal. The PAMC and the CONSOL Marine Terminal have consistently generated strong free cash flows. As of December 31, 2024, the PAMC controlled 557.6 million tons of high-quality Pittsburgh seam reserves, enough to allow for an equivalent of approximately 20 years of full-capacity production. As of December 31, 2024, the Itmann Mining Complex included 27.5 million tons of recoverable coal reserves that are sufficient to support an equivalent of more than 30 years of full-capacity production, based on our current estimates. In addition, as of December 31, 2024, we owned or controlled approximately 1.3 billion tons of Greenfield Reserves and Resources, portions of which are located in the NAPP, CAPP and ILB.

As a result of the Merger, our presence in the metallurgical coal market has expanded with two longwall mines, Leer and Leer South, in West Virginia, and two continuous miner mines, Beckley and Mountain Laurel, in West Virginia. These mines produce a premium metallurgical product used in the global steel industry. Through the Merger, we also gained thermal mines, Black Thunder and Coal Creek, in the PRB, as well as West Elk, in Colorado. The PRB mines produce thermal coal for sale into international and domestic markets. The West Elk mine in Colorado produces a high-quality, high calorific value thermal product that can compete effectively in seaborne markets, where thermal coal demand remains robust. The Merger has also enabled the Company to gain access to a second export terminal, DTA, on the U.S. Eastern seaboard, as well as strategic connectivity to ports on the West Coast and the Gulf of Mexico.

Through the Merger, we have created a global leader exceptionally well-positioned to compete and succeed in two significant, high-potential market segments – the global metallurgical and global high-rank thermal coal markets.

A map showing the location of our material properties is below:

Core Natural Resources Operations Locations



Thermal Mining Properties

Our active thermal mines are described below.

- **Pennsylvania Mining Complex:** The PAMC includes the Bailey Mine, the Enlow Fork Mine, the Harvey Mine and the Central Preparation Plant. Coal from the PAMC is valued because of its high energy content (as measured in Btu per pound), relatively low levels of sulfur and other impurities, and strong thermoplastic properties that enable it to be used in metallurgical, industrial and power generation applications. We mine our reserves from the Pittsburgh No. 8 Coal Seam, which is a large contiguous formation of high-Btu coal that is ideal for high productivity, low-cost longwall mining operations. The design of the PAMC is optimized to produce large quantities of coal on a cost-efficient basis. We can sustain high production volumes at comparatively low operating costs due to, among other things, our technologically advanced longwall mining systems, logistics infrastructure and safety. All our mines at the PAMC utilize longwall mining, which is a highly automated underground mining technique that produces large volumes of coal at lower costs compared to other underground mining methods. We aggressively market coal from the PAMC to a broad base of diverse and strategically selected industrial and metallurgical end users in the United States and globally. We are able to transport coal from the PAMC to our customers through an extensive logistical network, which is directly served by both the Norfolk Southern and CSX railroads, coupled with the operational synergies afforded by the CONSOL Marine Terminal. We also continue to support power plant customers in the eastern United States and abroad.
- **Black Thunder:** Black Thunder is a surface mining complex located on approximately 35,300 acres in Campbell County, Wyoming. The Black Thunder complex extracts thermal 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 378.0 million tons of proven and probable reserves at December 31, 2024. The Black Thunder mining complex currently consists of four active pit areas and two active 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 thermal coal from the Wyodak-R1 and Wyodak-R3 seams. The Coal Creek complex currently consists of one active pit area 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.
- **West Elk:** The West Elk mining complex is located on approximately 18,400 acres in Gunnison County, Colorado. The West Elk mining complex extracts thermal 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 34.5 million tons of

proven and probable reserves at December 31, 2024. The West Elk complex currently consists of a longwall, continuous miner sections, a preparation plant, and a loadout facility. We ship most of the coal raw to our customers via the Union Pacific railroad. When required to improve the quality of some of our coal production, it is processed through the 800 ton-per-hour preparation plant. The loadout facility can load an 11,000-ton train in less than three hours.

Metallurgical Mining Properties

Our active metallurgical mines are described below.

- *Leer*: The Leer complex is a longwall operation, located in Taylor County, West Virginia, that includes approximately 33.0 million tons of proven and probable coal reserves as of December 31, 2024 that are primarily sold as High-Vol A metallurgical quality coal from the Lower Kittanning seam, and are part of approximately 93,200 acres that is considered our Tygart Valley area. A significant portion of the reserves at Leer are owned rather than leased from third parties. All the production is processed through a 1,400 ton-per-hour preparation plant and loaded on the CSX railroad. A 15,000-ton train can be loaded in less than four hours.
- *Leer South*: The Leer South mining complex is a longwall operation in the Lower Kittanning seam with a preparation plant and a loadout facility located on approximately 26,500 acres in Barbour County, West Virginia. The 1,600 ton-per-hour preparation plant is located near the mine, and the loadout facility is served by the CSX railroad and connected to the plant by a 4,000 ton-per-hour conveyor system. The loadout facility is capable of loading a 15,000-ton unit train in less than four hours. Coal quality is primarily High-Vol A metallurgical coal similar to our Leer Complex. The Leer South mining complex had approximately 60.6 million tons of proven and probable reserves at December 31, 2024. A significant portion of the reserves at Leer South are owned rather than leased from third parties.
- *Beckley*: The Beckley mining complex is located on approximately 14,700 acres in Raleigh County, West Virginia. Beckley is extracting high quality, Low-Vol metallurgical coal in the Pocahontas No. 3 seam. The Beckley mining complex had approximately 24.7 million tons of proven and probable reserves at December 31, 2024. Coal is conveyed 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.
- *Mountain Laurel*: The Mountain Laurel mining complex is located on approximately 38,200 acres in Logan County and Boone County, West Virginia. Underground mining operations at the Mountain Laurel mining complex extract High-Vol B metallurgical coal from the Alma and No. 2 Gas seams. We process all of the coal through a 1,400 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.
- *Itmann Mining Complex*: The Itmann No. 5 Mine is located in Wyoming County, West Virginia. The Company controls approximately 20,224 contiguous acres of mining rights, by ownership or lease, to the Pocahontas 3 seam and the Pocahontas 4 seam. The Itmann Mining Complex had approximately 27.5 million tons of proven and probable coal reserves at December 31, 2024. The preparation plant includes a rail loadout located on the Guyandotte Class I rail line, which can be served by both Norfolk Southern and CSX, and has the capability for processing up to an additional 750 thousand to 1 million saleable tons annually from third-parties and mining of our surrounding reserves. This additional processing revenue provides an avenue of growth for the Company.

Terminals

Our ownership interests in two East Coast terminals are described below:

- *CONSOL Marine Terminal*: Through our wholly-owned subsidiary, CONSOL Marine Terminals LLC, we provide coal export terminal services through the Port of Baltimore. The terminal can either store coal or load coal directly into vessels from rail cars. It is also the only major east coast United States coal terminal served by two Class I railroads, Norfolk Southern and CSX. In 2024, approximately 17.0 million tons of coal were shipped through the CONSOL Marine Terminal. Approximately 84% of the tonnage shipped was produced by the Pennsylvania Mining Complex. The CONSOL Marine Terminal has storage capacity of 1.1 million tons with more than thirty acres of capacity for stockpiles. The facility possesses blending capabilities, and it has transloaded approximately 14.7 million tons of coal per year on average over the past five years, with a throughput capacity of approximately 20 million tons. The facility primarily serves international customers.
- *Dominion Terminal*: We own a 35% interest in DTA, a limited liability 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 primarily serves international customers, as well as domestic coal users located along the Atlantic coast of the United States. From time to time, we may lease a portion of our port capacity to third parties.

Non-Core Coal Assets and Surface Properties

We own significant coal assets and surface properties that are not in our short or medium-term development plans. We continually explore the monetization of these non-core assets by means of sale, lease, contribution to joint ventures, or a combination of the foregoing in order to bring the value of these assets forward for the benefit of our stockholders.

Mining Properties as of December 31, 2024

Information concerning our mining properties in this Annual Report on Form 10-K has been prepared in accordance with the requirements of subpart 1300 of Regulation S-K. Subpart 1300 of Regulation S-K requires us to disclose our mineral resources and our mineral reserves as of the end of our most recently completed fiscal year both in the aggregate and for each of our individually material mining properties.

As used in this Annual Report on Form 10-K, the terms “mineral resource,” “measured mineral resource,” “indicated mineral resource,” “inferred mineral resource,” “mineral reserve,” “proven mineral reserve” and “probable mineral reserve” are defined and used in accordance with subpart 1300 of Regulation S-K. Under subpart 1300 of Regulation S-K, mineral resources may not be classified as “mineral reserves” unless the determination has been made by a qualified person that the mineral resources can be the basis of an economically viable project. As such, you are cautioned that, except for that portion of mineral resources classified as mineral reserves, mineral resources do not have demonstrated economic value. Likewise, you are cautioned not to assume that all or any part of measured or indicated mineral resources will ever be converted to mineral reserves. We have used the term “coal” as in “coal reserves” and “coal resources” interchangeably with “mineral”.

The Company's estimates of recoverable coal reserves and coal resources are estimated internally by professionals whom we believe to be competent, including engineers and geologists. These estimates are based on geologic data, coal ownership information and current and/or proposed operating plans. The Company's recoverable coal reserves are proven and probable reserves that could be economically and legally extracted or produced at the time of the reserve determination, considering all material modifying factors. These estimates are periodically updated to reflect past coal production, updated mine plans, new exploration information, and other geologic or mining data. Acquisitions or dispositions of coal properties will also change these estimates. Changes in mining methods or preparation plant processes may increase or decrease the recovery basis for the estimates. The ability to update or modify the estimates of the Company's recoverable coal reserves is restricted to geologists and mining engineers whom we believe to be competent and material modifications recommended by such geologists or engineers are documented by the Company. The Company's estimates of recoverable coal reserves and coal resources, and supporting information, have been assessed by the John T. Boyd Company, a qualified person firm, which conforms to our requirements under subpart 1300 of Regulation S-K for qualified persons.

The information that follows relating to our individually material property – PAMC – is derived, for the most part, from, and in some instances is an extract from, the technical report summary (“TRS”) relating to the property prepared in compliance with Item 601(b)(96) and subpart 1300 of Regulation S-K by the John T. Boyd Company. Portions of the following information are based on assumptions, qualifications and procedures that are not fully described herein. Reference should be made to the full text of the TRS, incorporated herein and made a part of our 2024 Annual Report on Form 10-K.

The Company assigns coal reserves to mining complexes, and the amount of coal we assign to each mine is generally sufficient to support mining through the extent of our current mining permits. These permits were issued on various dates and each are required to be renewed under federal law every five years. All assigned reserves have their required permits or governmental approvals, or there is a high probability that these approvals will be secured. In addition, our mines and mining complexes may have access to additional reserves that have not yet been assigned.

Some reserves may be accessible by more than one mine because of the proximity of many of our mines to one another. In the following tables, the reserves and resources indicated for a mine are based on our review of current mining plans and reflect our best judgment as to which mine is most likely to utilize the reserve. Recoverable coal reserves and coal resources are either owned or leased. The leases generally provide for renewal through the anticipated life of the associated mine. These renewals are exercisable by the payment of minimum royalties. Under current mining plans, reserves and resources reported will be mined out within the period of existing leases or within the time period of probable lease renewal periods.

The following tables provide a summary of all the Company's coal reserves and resources as of the end of the fiscal year ended December 31, 2024:

**SUMMARY MATERIAL COAL RESERVES AT END OF THE
FISCAL YEAR ENDED DECEMBER 31, 2024**

	Coal Reserves (tons in millions)			Realized Coal Price	Recovery Factor
	Proven	Probable	Total		
PAMC:					
Bailey	53.6	72.3	125.9	\$ 61.29	58 %
Enlow Fork	206.8	32.4	239.2	\$ 61.29	54 %
Harvey	101.1	91.4	192.5	\$ 61.29	56 %
Total PAMC	361.5	196.1	557.6	\$ 61.29	56 %

**SUMMARY NON-MATERIAL COAL RESERVES AT END OF THE
FISCAL YEAR ENDED DECEMBER 31, 2024**

	Coal Reserves (tons in millions)		
	Proven	Probable	Total
Itmann Mining Complex	15.2	12.3	27.5
Other NAPP	3.6	19.7	23.3
Other CAPP	56.6	20.0	76.6
Total	75.4	52.0	127.4

**SUMMARY COAL RESOURCES AT END OF THE
FISCAL YEAR ENDED DECEMBER 31, 2024**

Non-Material	Coal Resources (ton in millions)				
	Measured	Indicated	Measured + Indicated	Inferred	Total
Mason Dixon Mine	106.6	158.4	265.0	8.9	273.9
River Mine	46.2	498.3	544.5	66.1	610.6
Other CAPP	44.3	66.3	110.6	1.9	112.5
Other ILB	106.6	137.7	244.3	0.6	244.9
Total	303.7	860.7	1,164.4	77.5	1,241.9

Note: All resource tons in the table above are reported as clean recoverable tons.

The following table classifies the Company's coal by type (thermal versus metallurgical). The table also classifies metallurgical coal as high, medium and low volatile, which is based on volatile matter content.

**Recoverable Coal Reserves and Coal Resources
by Product (in Millions of Tons) as of December 31, 2024**

Non-Material Metallurgical	<1.0% Sulfur	>1.0% <1.5% Sulfur	>1.5% Sulfur	Total	Percent By Product
By Rank:					
High Vol Bituminous	68.0	61.1	23.3	152.4	7.9 %
Med Vol Bituminous	14.4	5.6	—	20.0	1.1 %
Low Vol Bituminous	44.4	23.1	—	67.5	3.5 %
Total Metallurgical	126.8	89.8	23.3	239.9	12.5 %
Material Thermal	< 1.20 lbs. SO₂/MMBtu	> 1.20 < 2.50 lbs. SO₂/MMBtu	> 2.50 lbs. SO₂/MMBtu	Total	Percent By Product
By Region:					
NAPP	—	—	557.6	557.6	28.9 %
Non-Material Thermal					
NAPP	—	—	884.5	884.5	45.9 %
ILB	—	44.2	200.7	244.9	12.7 %
Total Thermal	—	44.2	1,642.8	1,687.0	87.5 %
Total	126.8	134.0	1,666.1	1,926.9	100.0 %
Percent of Total	6.6 %	6.9 %	86.5 %	100.0 %	

Internal Controls Disclosure

The modeling and analysis of the Company's reserves and resources has been developed by Company engineering and geology personnel and reviewed by several levels of internal management. This section summarizes the internal control considerations for the Company's development of estimations, including assumptions, used in reserve and resource analysis and modeling.

Records from exploration drilling completed on the mining properties comprise the primary data used in the evaluation of the coal resources for each property. The Company maintains written field and exploration guidelines that cover standard procedures, including site safety, mapping, and how to select proper drilling equipment, record accurate and detailed geological logs, perform coal sampling, supervise geophysical logging, and plug drill holes once work was complete.

The Company maintains all control of coal core samples, up to the point that samples are handed over to the lab performing testing. Once logging and sampling is complete, the sampled coal core intervals are transported to the Company's headquarters by exploration personnel, at which time they are handed over to quality personnel. The quality personnel arrange pick up by the selected independent lab that will perform the required analyses. All analytical work is conducted to International Organization for Standardization or ASTM International standards.

Management also assesses risks inherent in coal reserve and resource estimates, such as the accuracy of geophysical data that are used to support mine planning, identify hazards and inform operations of the presence of mineable deposits. Also, management is aware of risks associated with potential gaps in assessing the completeness of mineral extraction licenses, entitlements or rights, or changes in laws or regulations that could directly impact the ability to assess coal reserves and resources or could impact production levels. The over- or underestimation of reserves can have certain impacts on financial performance, such as changes in amortizations that are based on life-of-mine estimates.

Pennsylvania Mining Complex - Material Reserves

Pennsylvania Mining Complex. The Pennsylvania Mining Complex is located approximately 26 miles southwest of Pittsburgh, near the city of Washington and the borough of Waynesburg, all in Pennsylvania, and consists of three deep longwall mining operations - the Bailey Mine, the Enlow Fork Mine and the Harvey Mine - as well as a centralized preparation plant located at approximately 39°58'23.7" N latitude and 80°24'43.6" W longitude. The Company controls approximately 179,028 acres of mineral and/or surface rights as a complex collection of owned and/or leased tracts that range from less than an acre to several hundred acres in size covered by various coal deeds and coal lease agreements. Lease terms generally extend until all the coal is removed from the subject tract. Where applicable, royalty rates typically range from 3% to 8% of the gross sales price of the coal. The Company maintains the right to mine and remove almost all of the Pittsburgh Seam within the PAMC boundaries. As part of the PAMC, the Company controls surface rights to approximately 24,092 acres through fee simple ownership. This includes ownership of the property upon which the surface facilities for mine access, processing, storing, and shipping are located, as well as 3,509 permitted acres for coarse and fine refuse disposal facilities. Despite a lengthy ownership history dating back to the 1920s with the acquisition of certain coal leases by the Company's predecessor, commercial operations at the PAMC did not begin until 1984. The total book value of the PAMC and its associated plant and equipment as of December 31, 2024 is approximately \$1.4 billion.

The design of the PAMC is optimized to produce large quantities of coal on a cost-efficient basis. The PAMC is able to sustain high production volumes at comparatively low operating costs due to, among other things, its technologically advanced longwall mining systems, logistics infrastructure and safety. All of the PAMC's mines utilize longwall mining, which is a highly automated underground mining technique that produces large volumes of coal at lower costs compared to other underground mining methods. The PAMC typically operates 4-5 longwalls with 15-17 continuous mining sections. The full annual production capacity of the PAMC is up to 28.5 million tons of coal. The central preparation plant is connected via conveyor belts to each of the PAMC's mines and cleans and processes up to 8,200 raw tons of coal per hour. The PAMC's on-site logistics infrastructure at the central preparation plant includes a dual-batch train loadout facility capable of loading up to 9,000 clean tons of coal per hour and 19.3 miles of track linked to separate Class I rail lines owned by Norfolk Southern and CSX, which significantly increases the PAMC's efficiency in meeting its customers' transportation needs. Sources of electrical power, water, supplies and materials are readily available. Electrical power is provided to the mines and facilities by regional utility companies. Water is supplied by public water services, surface impoundments or water wells.

Numerous permits are required by federal and state law for underground mining, coal preparation and related facilities, and other incidental activities. Permits generally require that the Company post a performance bond in an amount established by the regulatory program to: (1) provide assurance that any disturbance or liability created during mining operation is properly mitigated, and (2) assure that all regulation requirements of the permit are fully satisfied. As of December 31, 2024, the Company held more than \$380 million in surety bonds to cover its obligations relating to mining and reclamation, mine subsidence, road repairs, stream restoration, water loss and dam safety with respect to the PAMC.

Bailey Mine. As of December 31, 2024, the Bailey Mine's assigned and accessible reserve base contained an aggregate of 125.9 million tons of clean recoverable coal with an average as-received gross heat content of approximately 12,938 Btu per pound and an approximate average pounds of sulfur dioxide per mmBtu of 3.76. The Bailey Mine is the first mine developed at the Pennsylvania Mining Complex. Construction of the slope and initial air shaft began in 1982. The slope development reached the coal seam at a depth of approximately 600 feet and, following development of the slope bottom, commercial coal production began in 1984. Longwall mining production commenced in 1985, and the second longwall was placed into operation in 1987. In 2010, a new slope and overland belt system was commissioned, which allowed a large percentage of the Bailey Mine to be sealed off. For the years ended December 31, 2024, 2023 and 2022, the Bailey Mine produced 10.8, 11.2 and 11.6 million tons of coal, respectively.

Enlow Fork Mine. As of December 31, 2024, the Enlow Fork Mine's assigned and accessible reserve base contained an aggregate of 239.2 million tons of clean recoverable coal with an average as-received gross heat content of approximately 13,011 Btu per pound and an approximate average pounds of sulfur dioxide per mmBtu of 3.06. The Enlow Fork Mine is located directly north of the Bailey Mine. Initial underground development was started from the Bailey Mine while the Enlow Fork slope was being constructed. Once the slope bottom was developed and the slope belt became operational, seals were constructed to separate the two mines. Following development of the slope bottom, commercial coal production began in 1989. Longwall mining production commenced in 1991, and the second longwall came online in 1992. In 2014, a new slope and overland belt system was commissioned and a substantial portion of the Enlow Fork Mine was sealed. For the years ended December 31, 2024, 2023 and 2022, the Enlow Fork Mine produced 9.2, 8.7 and 6.3 million tons of coal, respectively.

Harvey Mine. As of December 31, 2024, the Harvey Mine's assigned and accessible reserve base contained an aggregate of 192.5 million tons of clean recoverable coal with an average as-received gross heat content of approximately 12,940 Btu per pound and an approximate average pounds of sulfur dioxide per mmBtu of 4.08. The Harvey Mine is located directly east of the Bailey and Enlow Fork Mines. Similar to the Enlow Fork Mine, the Harvey Mine was developed off of the Bailey Mine's slope bottom. In order to separate the Harvey Mine from the existing Bailey Mine, seals were built around the original Bailey slope bottom, and the original slope was dedicated solely to the Harvey Mine. This transfer of infrastructure eliminated the need to make significant capital expenditures to develop, among other things, a new slope, airshaft and portal facility at the Harvey Mine. Development of the Harvey Mine began in 2009, and construction of the supporting surface facilities commenced in 2011. Longwall mining production commenced in March 2014. For the years ended December 31, 2024, 2023 and 2022, the Harvey Mine produced 5.7, 6.2 and 6.1 million tons of coal, respectively.

The following table sets forth additional information regarding the recoverable coal reserves at the Pennsylvania Mining Complex.

PENNSYLVANIA MINING COMPLEX - MATERIAL RESERVES
Recoverable Coal Reserves as of December 31, 2024 and 2023

Mine/Reserve	Reserve Class	As Received Heat Value (Btu/lb)	Owned	Leased	Recoverable Coal Reserves (As-Received)			
		Range	(%)	(%)	Proven	Probable	12/31/2024	12/31/2023
PA Mining Operations								
Bailey	Permitted	12,680 – 13,180	69 %	31 %	44.0	48.1	92.1	69.7
	Unpermitted	12,930 – 13,120	100 %	— %	9.6	24.2	33.8	67.7
Enlow Fork	Permitted	12,680 – 13,670	100 %	— %	76.9	8.7	85.6	69.9
	Unpermitted	12,670 – 13,240	97 %	3 %	129.9	23.7	153.6	178.1
Harvey	Permitted	12,810 – 13,180	98 %	2 %	60.3	39.4	99.7	18.9
	Unpermitted	12,710 – 13,120	100 %	— %	40.8	52.0	92.8	179.2
Total Recoverable Coal Reserves					361.5	196.1	557.6	583.5

Itmann Mining Complex - Non-Material Reserves

Itmann No. 5 Mine. The Itmann No. 5 Mine is located in Wyoming County, West Virginia, approximately 2.5 miles northwest of the town of Itmann at approximately 37°35'23.65" N latitude and 81°27'14.43" W longitude. The Company controls approximately 20,224 contiguous acres of mining rights (comprising 270 tracts), by ownership or lease, to the Pocahontas 3 seam (P3) and the Pocahontas 4 seam (P4). The majority (95%) of the acreage is held under coal leases with lengthy terms that are subject to industry standard royalties.

In 2019, the Company commenced development of the new Itmann No. 5 Mine, including excavation of the box cut to access the P3 seam. The mine accesses the P3 and P4 seams using a box cut drift entrance near an outcrop along Still Run Hollow. As of December 31, 2024, the Itmann No. 5 Mine's assigned and accessible reserve base contained an aggregate of 27.5 million tons of clean recoverable coal, enough to allow for more than 30 years of full-capacity production. These reserves contain an approximate average quality on a dry basis of 0.98% sulfur, 7.2% ash, and 19.3% volatile matter. Coal from the Itmann No. 5 Mine is currently extracted by underground methods using 6 continuous miner units in 3 super sections to achieve expected future capacity of approximately 900 thousand clean tons per year. For the years ended December 31, 2024, 2023 and 2022, the Itmann No. 5 Mine produced 393 thousand, 316 thousand and 164 thousand tons of coal, respectively.

General access to the Itmann No. 5 Mine is via a well-developed network of primary and secondary roads serviced by state and local governments. These roads offer direct access to the mine and processing facilities and are typically open year-round. Primary vehicular access to the property is via State Route 10/16, which follows the north bank of the Guyandotte River. The Guyandotte Class I rail line runs along the south bank of the Guyandotte River. Sources of electrical power, water, supplies and materials are readily available. Electrical power is provided to the mines and facilities by a regional utility company. Water is recycled from the abandoned underground Itmann No. 1 and No. 2 Mines or supplied by water wells.

The Itmann Preparation Plant was constructed in 2022 and began processing coal in late September 2022. Coal is shipped from the Itmann No. 5 Mine via tandem trucks to the 600 raw TPH processing facility, which is located approximately 2.5 miles west of the mine along WV State Route 10/16. The plant includes clean coal material handling systems capable of handling up to 3,500 TPH of product along with a 3,500 TPH unit train loadout located on the Guyandotte Class 1 rail line, which can be served by both Norfolk Southern and CSX. Third-party coal is also trucked into the facility for processing, blending and shipment via rail or truck.

As of December 31, 2024, the Company held less than \$1 million in surety bonds to cover its current obligations relating to mining and reclamation, mine subsidence, stream restoration and water loss with respect to the Itmann No. 5 Mine, preparation plant facility and refuse area.

The following table sets forth additional information regarding the recoverable coal reserves at the Itmann Mining Complex.

ITMANN MINING COMPLEX - NON-MATERIAL RESERVES
Recoverable Coal Reserves as of December 31, 2024 and 2023

Mine/Reserve	Reserve Class	Moisture Free Quality (%)			Recoverable Coal Reserves (As-Received)					
		Sulfur	Ash	Vol	Owned (%)	Leased%	Tons in Millions			
							Proven	Probable	2024 Total	2023 Total
Itmann Mining Complex										
Itmann No. 5	Permitted	0.97	8.4	18.5	— %	100 %	3.0	0.9	3.9	4.3
Itmann No. 5	Unpermitted	0.98	7.0	19.4	9 %	91 %	12.2	11.4	23.6	23.7
Tug Fork	N/A	—	—	—	— %	— %	—	—	—	0.4
Total Recoverable Coal Reserves							15.2	12.3	27.5	28.4

Other Properties - Non-Material Reserves and Resources as of December 31, 2024

The Company also holds other greenfield recoverable coal reserves and coal resources located in NAPP, CAPP and ILB, which are not deemed individually material and had an estimated 1,341.8 million tons of recoverable coal reserves and coal resources. The Company's estimate includes recoverable high-vol, mid-vol or low-vol metallurgical coal reserves and resources of 99.9 million tons and 112.5 million tons, respectively. Additionally, worldwide demand for metallurgical coal allows some of our recoverable coal reserves and resources, currently classified as thermal coal but that possess certain qualities, to be sold as metallurgical coal. The extent to which we can sell thermal coal as crossover metallurgical coal depends upon a number of factors, including the quality characteristics of the reserve, the specific quality requirements and constraints of the end-use customer and market conditions (which affect whether customers are compelled to substitute lower-quality crossover coal for higher-quality metallurgical coal in their blends to realize economic benefits).

The following tables set forth our non-operating recoverable coal reserves and coal resources by region.

Non-Material, Non-Operating Recoverable Coal Reserves and Coal Resources
as of December 31, 2024 and 2023

Property	As Received Heat Value (Btu/lb)	Owned (%)	Leased (%)	Recoverable Coal Reserves (As-Received)			
	Range			Proven	Probable	12/31/2024	12/31/2023
NAPP	11,400 – 13,400	100 %	— %	3.6	19.7	23.3	23.3
CAPP	12,400 – 14,100	87 %	13 %	56.6	20.0	76.6	76.6
Total Non-Operating Reserves				60.2	39.7	99.9	99.9

Property	As Received Heat Value (Btu/lb)	Owned (%)	Leased (%)	Recoverable Coal Resources (As-Received)				
	Range			Measured	Indicated	Inferred	12/31/2024	12/31/2023
Mason Dixon Mine	12,250 – 13,060	96 %	4 %	106.6	158.4	8.9	273.9	273.9
River Mine	12,790 – 13,100	100 %	— %	46.2	498.3	66.1	610.6	610.6
CAPP	12,400 – 14,100	67 %	33 %	44.3	66.3	1.9	112.5	112.5
ILB	11,600 – 12,000	75 %	25 %	106.6	137.7	0.6	244.9	244.9
Total Non-Operating Resources				303.7	860.7	77.5	1,241.9	1,241.9

Title to coal properties that we lease or purchase and the boundaries of these properties are verified by law firms retained by us at the time we lease or acquire the properties. Consistent with industry practice, abstracts and title reports are reviewed and updated approximately five years prior to planned development or mining of the property. If defects in title or boundaries of undeveloped reserves are discovered in the future, control of and the right to mine reserves could be adversely affected.

The following table sets forth the total royalty tonnage and the amount of income (net of related expenses) we received from royalty payments for the years ended December 31, 2024, 2023 and 2022.

Year	Total Royalty Tonnage (in thousands)	Total Royalty Income * (in thousands)
2024	1,985	\$ 17,633
2023	1,179	\$ 8,326
2022	1,030	\$ 9,877

* Excludes advanced mining royalty payments received of \$746, \$529 and \$381 during the years ended December 31, 2024, 2023 and 2022, respectively.

Royalty tonnage leased to third parties is not included in the amounts of produced tons that we report, nor is it included in our reported recoverable reserves and resources.

Production as of December 31, 2024

In the year ended December 31, 2024, 98.5% of the Company's production came from underground mines equipped with longwall mining systems. The Company employs longwall mining techniques in its underground mines where the geology is favorable and reserves are sufficient, namely, in the three mines located at the PAMC. Underground longwall mining uses continuous mining units to develop the mains and gate roads for longwall panels. The longwall systems are highly mechanized, capital-intensive operations to efficiently extract coal within the longwall panels. Mines using longwall systems have a low variable cost structure compared with other types of mines and can achieve high productivity levels compared with those of other underground mining methods. Because the Company has substantial reserves readily suitable to these operations, the Company believes that these longwall mines can increase production volumes at a low incremental cost.

The following table shows the production, in millions of tons, for the Company's mines for the years ended December 31, 2024, 2023 and 2022, the location of each mine, the type of mine, the type of equipment used at each mine, method of transportation and the year each mine was established or acquired by us.

Mine	Loadout Facility Location	Mine Type	Mining Equipment	Transportation	Tons Produced (in millions)			Year Established or Acquired
					2024	2023	2022	
PA Mining Operations								
Bailey	Enon, PA	U	LW/CM	R R/B	10.8	11.2	11.6	1984
Enlow Fork	Enon, PA	U	LW/CM	R R/B	9.2	8.7	6.3	1989
Harvey	Enon, PA	U	LW/CM	R R/B	5.7	6.2	6.1	2014
Total					<u>25.7</u>	<u>26.1</u>	<u>23.9</u>	
Itmann Mining Complex								
Itmann No. 5 Mine	Itmann, WV	U	CM	T/R	0.4	0.3	0.2	2020
Total Company					<u>26.1</u>	<u>26.4</u>	<u>24.1</u>	

Table may not sum due to rounding.

U	—	Underground
LW	—	Longwall
CM	—	Continuous Miner
R	—	Rail
R/B	—	Rail to Barge or Vessel
T/R	—	Truck to Rail

Coal Marketing and Sales as of December 31, 2024

The following table sets forth tons sold and average coal revenue per ton sold for the periods indicated:

	Years Ended December 31,		
	2024	2023	2022
Total Coal Revenue (in millions)	\$ 1,787	\$ 2,106	\$ 2,019
PA Mining Operations Tons Sold (in millions)	25.7	26.0	24.1
Average Coal Revenue per Ton Sold – PA Mining Operations	\$ 65.54	\$ 77.74	\$ 69.89
Itmann Mining Complex Tons Sold (in millions)	0.7	0.5	0.2
Coal Revenue per Ton Sold – Itmann Mining Complex	\$ 153.10	\$ 158.71	\$ 219.44

We sell coal produced by our mines and additional coal that is purchased by us from other producers. Approximately 36% of our 2024 coal revenue was from U.S. electric generators, 60% of our 2024 coal revenue was from export markets and 4% of our 2024 coal revenue was from other domestic customers. Approximately 32% of our 2023 coal revenue was from U.S. electric generators, 66% of our 2023 coal revenue was from export markets and 2% of our 2023 coal revenue was from other domestic customers. Approximately 45% of our 2022 coal revenue was from U.S. electric generators, 53% of our 2022 coal revenue was from export markets and 2% of our 2022 coal revenue was from other domestic customers.

We had sales to approximately 50 customers from our coal operations during the past two years. During 2024, two customers each comprised over 10% of our total sales, aggregating approximately 22% of our total sales. During 2023, two customers each comprised over 10% of our total sales, aggregating approximately 23% of our total sales.

Similarly, prior to the Merger, Arch marketed its metallurgical and thermal coal to domestic and foreign steel producers, domestic and foreign power generators, and other industrial facilities. For the year ended December 31, 2024, Arch derived approximately 16% of its total coal revenues from sales to its three largest customers. Additionally, in 2024, Arch sold coal to domestic customers located in 25 different states as the location of its mines enabled it to ship coal to most of the major coal-fueled power plants in the United States and exported coal to Europe, Asia, Central and South America, and Africa.

Coal Contracts and Pricing

We sell coal to an established customer base through opportunities as a result of strong business relationships, or through a formalized bidding process. Contract volumes range from a single shipment to multi-year agreements for millions of tons of coal. In the ordinary course of business, we make efforts to renew or extend contracts scheduled to expire. Although there are no guarantees, we generally have been successful in renewing or extending contracts in the past.

Domestic coal revenue tends to be derived from contracts that typically have a term of one year or longer, and the pricing is typically fixed. Historically, export coal revenue tended to be derived from spot or shorter-term contracts with pricing determined closer to the time of shipment or based on a market index; however, the Company has secured several long-term export contracts with varying pricing arrangements.

The volume of coal to be delivered is specified in each of our coal contracts. Although the volume to be delivered under the coal contracts is stipulated, the parties may vary the timing of the deliveries within specified limits. Coal contracts typically contain force majeure provisions allowing for the suspension of performance by either party for the duration of certain force majeure events. Force majeure events include, but are not limited to, unexpected significant geological conditions or natural disasters. Depending on the language in the contract, some contracts may terminate upon continuance of an event of force majeure that extends for a period greater than three to twelve months.

Of our 2024 sales tons, approximately 57% were sold to export markets and 43% were sold to domestic customers. Of our 2024 sales tons, 49% were sold in the electric power generation market, 33% were sold in the industrial market and 18% were sold in the metallurgical market.

During the past two years, on coal revenue of \$1.7 billion in 2024 and \$2.0 billion in 2023, our average coal revenue per ton sold for coal produced from the PAMC was \$65.54/ton in 2024 and \$77.74/ton in 2023. Pricing for our product depends strongly on conditions in the domestic and international thermal and metallurgical coal markets.

The prices we are able to achieve in the domestic thermal market depend on a number of factors, including: (i) the supply-demand balance for Northern Appalachian coal, (ii) prices for other competing sources of energy used for electricity generation, such as natural gas, (iii) power prices in the regions we serve, (iv) prices for coals from other basins (including CAPP, ILB and PRB) that compete in these same regions, and (v) pricing under our longer-term contracts, which may have been entered into under different market conditions. Natural gas prices, coupled with increased capacity from new natural gas combined-cycle power plants and renewable energy sources, put pressure on power prices and on the demand for coal-fired electric power generation. These factors can affect the prices that we are able to achieve in the domestic thermal markets.

Similarly, imbalances in global supply and demand for energy fuels can cause substantial variability in pricing in the export markets we serve, which include industrial, metallurgical and power generation applications. The prices we are able to achieve in these export markets depend on a number of factors, including: (i) the supply-demand balance of seaborne thermal coal, specifically high calorific value coals, (ii) the supply-demand balance of seaborne metallurgical coal, (iii) prices for other competing sources of energy used in certain industrial applications, such as petroleum coke and metallurgical coal, (iv) prices for other competing sources of energy used for electricity generation, such as natural gas, (v) prices for other export coals that compete in these same markets, and (vi) pricing under our longer-term contracts, which may have been entered into under different market conditions.

Distribution

Coal is transported from the Company's mining operations to customers predominantly by railroad cars, vessels or a combination of these means of transportation. Most customers negotiate their own transportation rates, while our sales and logistics specialists negotiate freight and equipment agreements with various transportation suppliers, including railroads, barge lines, terminal operators, ocean vessel brokers and trucking companies for the remaining customers.

Seasonality

Our business has historically experienced limited variability in its results due to the effect of seasonal changes. Demand for coal-fired power can increase due to unusually hot or cold weather as power consumers use more air conditioning or heating, respectively. Conversely, mild weather can result in weaker demand for our coal. Adverse weather conditions, such as blizzards or floods, can impact our ability to transport coal over our overland conveyor systems and to transport our coal by rail.

Competition

The coal industry is highly competitive, with numerous producers selling into all markets that use coal. There are numerous large and small producers in all coal-producing basins of the United States, and we compete with many of these producers, including those who export coal abroad. Potential changes to international trade agreements, trade concessions and tariffs or other political and economic arrangements may benefit coal producers operating in countries other than the United States. We may be adversely impacted on the basis of price or other factors compared to companies that in the future may benefit from favorable foreign trade policies or other arrangements. In addition, coal is sold internationally in U.S. dollars and, as a result, general economic conditions in foreign markets and changes in foreign currency exchange rates may provide our international competitors with a competitive advantage. If our competitors' currencies decline against the U.S. dollar or against our international customers' local currencies, those competitors may be able to offer lower prices for coal to our customers. Furthermore, if the currencies of our overseas customers were to significantly decline in value in comparison to the U.S. dollar, those customers may seek decreased prices for the coal we sell to them. Consequently, currency fluctuations could adversely affect the competitiveness of our coal in international markets, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

The most important factors on which we compete are coal price, coal quality and characteristics, transportation costs and reliability of supply. Demand for coal and the prices that we will be able to obtain for our coal are closely linked to coal consumption patterns of international coal consumers and the domestic electric generation industry. These coal consumption patterns are influenced by many factors that are beyond our control, including demand for electricity, which is significantly dependent upon economic activity and summer and winter temperatures, government regulation, technological developments and the location, quality, price and availability of competing fuel sources.

Indirect competition from natural gas-fired plants that are relatively more efficient, less expensive to construct and less difficult to permit than coal-fired plants has the most potential to displace a significant amount of coal-fired electric power generation in the near term, particularly older, less efficient coal-fired powered generators. Federal and state mandates for increased use of electricity derived from renewable energy sources could also affect demand for our coal. Such mandates, combined with other incentives to use renewable energy sources, such as tax credits, could make alternative fuel sources more competitive with coal.

Human Capital Management

As of December 31, 2024, we had 2,076 employees, of which 41 CONSOL Marine Terminal employees were represented by a collective bargaining agreement. Following the Merger, which closed on January 14, 2025, we had 5,389 employees, of which 41 CONSOL Marine Terminal employees were represented by a collective bargaining agreement. We believe our efforts in managing our workforce have been effective, evidenced by a strong culture and a good relationship between the Company and our employees.

Health and Safety. The success of our business is fundamentally connected to the well-being of our people. Accordingly, we are committed to the health, safety and wellness of our employees. We provide our employees and their families with access to health and welfare programs, including benefits that support their physical and mental health by providing tools and resources to help them improve or maintain their health status.

Talent. Through our long operating history and experience with technological innovation, we appreciate the importance of retention, growth and development of our employees. Our approach to talent is to both develop talent from within and supplement with external hires. We believe this method has yielded loyalty and commitment in our employee base, which in turn grows our business, while at the same time, adding new employees and external ideas supports a continuous improvement mindset and contributes to our goals of having a diverse and inclusive workforce. We believe that having approximately 38% of the Company's workforce with at least 10 years of company service coupled with our average voluntary retention rate of 89% as of the end of fiscal year 2024 reflects the engagement of our employees.

Total Rewards. Our employees are critical to the success of our company. As such, we offer market competitive total rewards programs for our employees in order to attract and retain superior talent. In addition to competitive base wages, the Company has additional programs, which include bonus opportunities, a Company-matched 401(k) plan,

healthcare and insurance benefits, health savings spending accounts, paid time off, family leave, flexible work schedules, employee wellness programs and employee assistance programs.

Employee Development. The Company provides its employees with tools and development resources to enhance their skills and careers at the Company, including (i) encouraging employees to discuss their professional development and identify interests or possible cross-training areas during annual performance reviews with their supervisors, (ii) providing a tuition aid program for educational pursuits related to present work or possible future positions, (iii) providing talent review and succession planning, and (iv) providing opportunities for on-the-job growth, through stretch assignments or temporary projects outside of an employee's typical responsibilities.

Laws and Regulations

Overview

Our coal mining operations are subject to various federal, state and local environmental, health and safety regulations. Regulations relating to our operations require us to obtain permits and other licenses; reclaim and restore our properties after mining operations have been completed; store, transport and dispose of materials used or generated by our operations; manage surface subsidence from underground mining; control water and air emissions; protect wetlands and endangered plants and wildlife; and ensure employee health and safety. Furthermore, the electric power generation industry, steel production industry and other users of our coal are subject to extensive regulation regarding the environmental impact of their activities, which could affect demand for our coal.

We seek to conduct our operations in compliance with applicable laws and regulations. However, from time to time, violations occur during operations, and we cannot assure that we have been or will be at all times in compliance with such laws and regulations. Compliance with these laws has substantially increased the cost of coal mining, and the possibility exists that new legislation or regulations may be adopted which would have a significant impact on our coal mining operations or our customers' ability to use our coal and may require us or our customers to significantly modify operations or incur substantial costs. Additionally, these laws are subject to revision and may become increasingly stringent. The ultimate effect of implementation may not be predictable, as associated regulations may still be in development or subject to public notice, extensive comment or judicial review.

In addition, independent of the regulatory process, presidential administrations could issue Executive Orders or other Presidential Directives having the force of law that could immediately impact our business or our customers' businesses. In recent years, these Executive Orders and other Presidential Directives have been subject to revision, repeal and judicial challenge with uncertain outcomes. For example, former President Joe Biden issued Executive Orders seeking to adopt new regulations and policies to address climate change and to suspend, revise or rescind prior agency actions that the administration identified as conflicting with its policies. Upon taking office, President Trump rescinded several Executive Orders that were key to former President Biden's environmental agenda, creating additional regulatory uncertainty.

The following is a summary of the more significant existing environmental and worker health and safety laws and regulations to which we or our customers' business operations are subject and for which compliance may have a material adverse effect on our business, results of operations and financial condition, and/or demand for our coal product by our customers.

Environmental Laws

Clean Air Act. The federal Clean Air Act ("CAA") and corresponding state and local laws and regulations affect multiple aspects of our business, both directly and indirectly. The CAA directly impacts our coal mining and coal export operations through permitting and emission control requirements for the construction, modification or expansion of certain facilities. Indirectly, the CAA affects the U.S. coal industry by extensively regulating the air emissions of coal-fired electric power generating plants or other industrial facilities operated by our customers.

Coal impurities are released into the air when coal is burned, and the CAA regulates specific emissions, such as sulfur dioxide, nitrogen oxides, particulate matter, mercury and other substances, produced during that process. In addition, CAA programs such as Maximum Achievable Control Technology ("MACT") emission limits for Hazardous Air Pollutants, the Regional Haze Program, New Source Review permitting requirements and other federal rulemakings may directly or indirectly affect our operations. Such regulations restricting emissions from coal-fired electric generating plants or other industrial facilities could increase the costs of operating and affect demand for coal as a fuel source, therefore potentially affecting the volume of our sales. Moreover, additional environmental regulations increase the likelihood that existing coal-fired electric generating plants will be decommissioned or replaced with alternative sources of fuel and reduce the likelihood that new coal-fired plants will be built in the future.

On January 20, 2025, President Trump issued an Executive Order titled “Unleashing American Energy.” Among other things, that order directs all federal agency heads to “review all existing regulations, orders, guidance documents, policies, settlements, consent orders, and any other agency actions” to identify any agency actions that are inconsistent with the administration’s energy and environmental policies or that “impose an undue burden on the identification, development, or use of domestic energy resources. The order further requires the EPA Administrator to submit a recommendation to the White House Office of Management and Budget regarding the legality and continuing applicability” of the EPA Administrator’s Endangerment and Significant Contribution Finding for greenhouse gases, which was made under Section 202(a) of the CAA in December 2009. Actions to give effect to this Executive Order could have significant effects on the EPA’s CAA regulatory programs, although the nature of those effects is, at this time, unclear.

Mercury and Air Toxics Standards Rule. In 2012, the United States Environmental Protection Agency (“EPA”) promulgated a rule for National Emission Standards for Hazardous Air Pollutants (“NESHAP”) for new and existing coal-fueled and oil-fueled electric generating plants. The EPA’s 2012 Mercury and Air Toxics Standards rule (“MATS Rule”) imposed MACT emissions limitations on Hazardous Air Pollutants (“HAPs”), such as mercury, acid gas HAPs, HAP metals and organic HAPs, for applicable facilities. The rule was challenged, and ultimately found arbitrary and capricious by the U.S. Supreme Court in 2015, for failing to consider the costs imposed by the MATS Rule. The D.C. Circuit remanded the rule without vacating it. In 2020, the EPA finalized the MATS Reconsideration Rule, reversing the agency’s “appropriate and necessary” conclusion even while retaining coal- and oil-fired power plants on the list of affected source categories and maintaining existing emission limits for mercury and other HAPs. The final rule was subject to legal challenge in multiple cases before the D.C. Circuit. In February 2022, the EPA published its proposed rule revoking the 2020 MATS Reconsideration Rule and reaffirming the “appropriate and necessary” supplemental finding, with a final rule published in 2023. In a related May 2024 rulemaking, the EPA published the Residual Risk and Technology Review (“RTR”) rule, finalizing amendments to the NESHAPs for coal- and oil-fired electric utility steam generating units. In August 2024, a request to stay the rule pending judicial review was denied by the D.C. Circuit. Subsequently, emergency applications to stay the rule were denied by the Supreme Court in October 2024 while litigation is ongoing. The emissions limitations in the final rule, or similar future rulemakings, could require our customers to incur significant capital costs associated with installation of emissions control technologies, which could negatively affect the demand and prices for our coal, our business and results of operations.

National Ambient Air Quality Standards. The CAA requires the EPA to set National Ambient Air Quality Standards (“NAAQS”) for six “criteria pollutants” (including particulate matter (“PM”), nitrogen oxides (“NO_x”), ozone, sulfur dioxide (“SO₂”), lead and carbon monoxide) considered harmful to public health and the environment. The EPA must review these standards every five years. Areas that are not in compliance with the NAAQS are considered “non-attainment areas.” The designation of new non-attainment areas could prompt local changes to permitting or emissions control requirements, as prescribed by federally mandated state implementation plans (“SIPs”) that require emission source identification and emission reduction plans. In 2020, the EPA finalized decisions to retain the 2015 NAAQS for ozone and PM; however, both decisions were subject to legal challenge. Related to the ozone NAAQS, in August 2023, the EPA announced that it would not complete its reconsideration of the 2020 decision to retain the NAAQS but would instead begin a new review of the ozone NAAQS, which is ongoing. Related to the PM NAAQS, the EPA published a final rule lowering the standard for fine particulate matter (“PM_{2.5}”) which became effective in May 2024, but is subject to ongoing litigation in the D.C. Circuit Court of Appeals. Separately, in December 2024, the EPA completed its review of the secondary public welfare NAAQS for NO_x, SO₂ and PM, electing to retain the existing standards for NO_x and PM and to lower the standard for SO₂ with an effective date of January 27, 2025. This final rule is also the subject of a judicial challenge. New NAAQS review proceedings for NO_x and ozone have been announced and are in preliminary phases. New and recent revisions to the NAAQS could trigger new nonattainment areas that would result in more stringent SIPs that require significant investment in emissions control technologies associated with our or our customers’ operations, and could adversely affect our costs and the demand for our coal.

Good Neighbor Plan. In February 2023, the EPA issued its Final Disapproval of SIPs submitted by 21 states pursuant to the “good neighbor” provisions of the CAA to address interstate air pollution in furtherance of attaining the 2015 Ozone NAAQS. The EPA’s SIP disapprovals were challenged by several states in the respective jurisdictions’ federal court of appeals, and litigation is ongoing in the majority of cases. The U.S. Court of Appeals for the Sixth Circuit has, however, ruled in December 2024 that the EPA’s disapproval of Kentucky’s SIP was unlawful.

Following these SIP disapprovals, in March 2023, the EPA published the final Good Neighbor Plan for the 2015 Ozone NAAQS, which applies to power plants and industrial facilities in 23 states. The rule relies, in part, on a NO_x allowance trading program for electricity generating units (“EGUs”), and requires operation of existing, and installation of new, emissions control technologies for EGUs and other industrial sources. In June and September 2023, the EPA issued two interim final rules amending the Good Neighbor Plan to administratively stay the effectiveness of the rule in 12 of the 23 states, in response to judicial orders partially staying the EPA’s disapproval of the SIPs.

In addition to the challenges to the SIP disapprovals, parties also challenged the EPA's Good Neighbor Plan itself in the D.C. Circuit. In June 2024, while the D.C. Circuit proceedings were ongoing, the Supreme Court issued a decision temporarily blocking implementation of the Good Neighbor Plan while litigation is ongoing. To comply with the Supreme Court's order, in October 2024, the EPA issued a third interim final rule temporarily amending the Good Neighbor Plan to administratively stay requirements for covered facilities in the remaining 11 states for which an administrative stay was not previously implemented, including Maryland and Pennsylvania. The three interim final rules include provisions to ensure covered facilities continue to mitigate emissions with respect to the 2008 ozone NAAQS while the Good Neighbor Plan is stayed. The stay will remain in effect pending the litigation challenging the Good Neighbor Plan before the D.C. Circuit and any related proceedings in the U.S. Supreme Court. As a result of these related rulemakings and depending on the outcome of these various legal proceedings, we and our customers could incur significant compliance costs that may lead to accelerated EGU closures or fuel switching, which could adversely affect the demand for our coal.

Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electricity Utility Generating Units under CAA Section 111(d). In October 2015, the EPA published a final rule under section 111(d) of the CAA known as the Clean Power Plan ("CPP"), which required states to create systems that reduce carbon dioxide ("CO₂") emissions from existing fossil fuel-fired EGUs by 28% in 2025 and 32% in 2030, compared to 2005 levels. The CPP was subject to numerous legal challenges and was stayed by the U.S. Supreme Court, pending the D.C. Circuit's review of the rule. The D.C. Circuit never reviewed the CPP because the EPA decided to reconsider it.

Following its reconsideration of the CPP, in July 2019, the EPA published the Affordable Clean Energy ("ACE") rule which repealed the CPP and established greenhouse gas ("GHG") guidelines for states to use when developing plans to limit CO₂ emissions from coal-fired EGUs. The ACE rule provided that heat rate efficiency improvements are the Best System of Emission Reduction ("BSER") for coal-fired electric utility sources under the CAA, directed states to develop specific SIPs to implement the rule, and revised CAA section 111(d) regulations to give states greater authority regarding these plans. Several states and public interest groups filed petitions seeking review and reconsideration of the ACE rule. In March 2021, the D.C. Circuit issued its partial mandate vacating the ACE rule but leaving the CPP Repeal intact to allow time for the EPA to issue a new rule under section 111(d). Separately, the Supreme Court agreed to hear four consolidated legal appeals to the D.C. Circuit decision striking down the ACE rule. In June 2022, the Supreme Court issued its decision reversing the D.C. Circuit's ruling and limiting expansive interpretations of the EPA's authority under Section 111 of the CAA, while generally upholding the EPA's authority to regulate GHGs as air pollutants and remanding the case for further proceedings.

On May 9, 2024, the EPA published a suite of final rulemakings repealing the ACE Rule and promulgating GHG emission guidelines for existing fossil fuel-fired EGUs, with an effective date of July 8, 2024. For existing coal-fired EGUs, the rules establish the BSER based on the EGU retirement date. For EGUs in operation on or after January 1, 2039, the rule requires EGUs to be equipped with Carbon Capture and Storage ("CCS") with 90 percent capture on or before January 1, 2032. For EGUs that will cease operations by January 1, 2039, the rule requires compliance with a numeric emission rate based on 40 percent co-firing natural gas with coal on or before January 1, 2030. Coal-fired EGUs planning to permanently cease operations before January 1, 2032 will not be subject to emissions guidelines. This suite of rules was challenged in ongoing litigation before the D.C. Circuit.

To achieve compliance, our customers could be required to incur substantial capital investment and increased operating costs. Alternatively, EGU owners and operators may accelerate the closure of existing power plants or agree to curtail their use. In July 2024, a request to stay the rule pending judicial review was denied by the D.C. Circuit Court of Appeals. Subsequently, in October 2024, the Supreme Court denied emergency applications to stay the rule while litigation is ongoing. Such actions make alternative sources of energy more competitive and could negatively affect the demand and prices for our coal, thereby having a material adverse impact on our business and results of operations.

New Source Performance Standards ("NSPS") for Greenhouse Gas Emissions from New, Modified, or Reconstructed Fossil Fuel-Fired EGUs Under CAA Section 111(b). In October 2015, the EPA published a final rule limiting CO₂ emissions from new, modified and reconstructed fossil fuel-fired EGUs under section 111(b) of the CAA and identifying partial CCS as BSER. The rule was subject to numerous legal challenges in the D.C. Circuit that continue to be held in abeyance pending the EPA's review of the rule. In December 2018, the EPA published a proposed rule proposing to change its BSER determination from partial CCS to use of a supercritical boiler but the EPA never took final action on that proposal. In January 2021, the EPA finalized its "Pollutant Specific Significant Contribution Finding ("SCF") for Greenhouse Gas Emissions from New, Modified and Reconstructed Electric Utility Generating Units" rule, concluding that the EGU source category GHG emissions are significant and warrant regulation. Although the SCF rule was subsequently challenged in court, the case was ultimately vacated because Congress revoked the rule through the Congressional Review Act in June 2021. On May 23, 2023, the EPA published a notice of proposed rulemaking ("NPRM") proposing to retain the NSPS for coal-fired EGUs that was promulgated in 2015 and was based on partial CCS. While no new coal-fired power stations are currently under construction in the U.S., promulgation of rules limiting CO₂ emissions or requiring deployment

of advanced technologies such as CCS will promote continuation of this trend. A lack of investment in construction, modification or reconstruction of coal-fired EGUs could negatively affect the demand and prices for our coal, thereby having a material adverse impact on our business and results of operations.

Global Climate Change

Our customers' consumption of the coal we produce results in the emission of GHGs, particularly CO₂. During operations, our coal mines release methane, a GHG, to promote a safe working environment for our miners underground. GHGs are believed to contribute to warming of the earth's atmosphere and other climatic changes. As a result, global climate change initiatives, including imposition of taxes or fees and promulgation of regulations intended to reduce GHG emissions, have and are expected to continue to result in (i) the decreased utilization or accelerated closure of existing coal-fired EGUs, (ii) the increased utilization of alternative fuels or generating systems, (iii) a reduction or elimination of new coal-fired power plant construction in certain countries, or (iv) the advancement of technologies aimed toward replacing or minimizing the use of coal in industrial or metallurgical processes. Additionally, regulations intended to limit or reduce emissions of methane from coal mines (discussed below) could have a direct impact on our results of operations.

To date in the U.S., no legislation to comprehensively regulate global climate issues and GHG emissions has been signed into law. While it is possible that the U.S. will adopt legislation in the future, the timing and specific requirements are uncertain. In the United States, findings published by the EPA in 2009 concluded that GHG emissions pose an endangerment to public health and the environment, and as a result, the EPA has the authority to adopt and implement regulations restricting GHG emissions under existing provisions of the CAA.

Since 2011, the EPA has required active underground coal mines and certain support facilities exceeding a minimum GHG emission threshold, including our operations, to report annual emissions to the EPA under the GHG Mandatory Reporting Rule ("MRR"). These emissions are not currently regulated by the EPA. Previous petitions and judicial challenges seeking to compel the EPA to classify coal mines as stationary sources appropriate for regulation have been unsuccessful to date. If the EPA were to regulate coal mine methane emissions in the future, we may be required to install additional pollution control devices, pay fees or taxes for our emissions, or incur expenses associated with the purchase of emissions credits in order to continue operation. Alternatively, we may need to curtail coal production. The magnitude of impact on our operations, capital expenditures, financial condition or cash flows would be dependent on the structure of any final regulation and the degree of emission reduction prescribed.

In federal, state and international jurisdictions, laws and regulations requiring companies to disclose climate-related risks, certain climate-related financial metrics, an accounting of direct and indirect GHG emissions and details of climate change targets and goals have been proposed or enacted. For example, on March 6, 2024, the Securities and Exchange Commission ("SEC") adopted final rules requiring registrants to disclose certain climate-related information in their registration statements and annual reports. An administrative stay of the rule was subsequently granted by the Fifth Circuit Court of Appeals, pending ongoing judicial review. Similar rules, such as the California Climate Corporate Data Accountability Act and the EU Corporate Sustainability Reporting Directive impose similar reporting obligations in future years. Calculation of some GHG emissions can involve uncertainty and lack precision because of the absence of reliable inputs or methods to perform such calculations, which could give rise to litigation risk. In addition to challenges related to compliance burden, climate disclosure rules could proliferate investment bias and practices by investors and financial institutions to exclude our securities from investment portfolios or increase our cost of capital, regardless of the Company's results, strategy or financial performance.

In the absence of sweeping federal legislation on GHG emissions in the United States, a number of states, governors, mayors and businesses have committed to broad goals for GHG reductions or requirements to deploy carbon-free or renewable sources of electricity. Such goals include those announced by multiple domestic utilities, including some of our customers, pledging to substantially reduce or to achieve net zero GHG emissions, to accelerate closure of existing coal-fired power generating stations, or to increase generating capacity from renewable sources. These goals could ultimately affect the demand and prices for our coal, as these customers seek to achieve such goals over time.

At the state level, in response to a 2019 Executive Order by Governor Tom Wolf, Pennsylvania adopted a regulation that would allow Pennsylvania to join the Regional Greenhouse Gas Initiative ("RGGI") in 2022. RGGI is a mandatory cap-and-trade program among 10 northeastern states to reduce CO₂ emissions from the power sector. Similar to other mandatory cap-and-trade initiatives, such as California's cap-and-trade program, RGGI seeks to limit CO₂ emissions annually, in order to achieve a prescribed long-term emissions reduction target. In cap-and-trade scenarios, power generators or other GHG emitters are required to purchase allowances, available through auction or a secondary market, that are equal to one ton of CO₂ emissions, thereby increasing the cost of electric power generation and incentivizing the power generator to limit their CO₂ emissions by combusting fewer fossil fuels, including coal.

Pennsylvania's RGGI regulation was subject to immediate legal challenge, and in 2023, the Pennsylvania Commonwealth Court issued its decision striking down Pennsylvania's participation in RGGI and determining that RGGI constitutes an illegal tax under the Pennsylvania Constitution. The decision was appealed to the Supreme Court of Pennsylvania, and a ruling is expected in 2025. Separately, in May 2024, the Pennsylvania Climate Emissions Reduction ("PACER") Program was introduced in the Pennsylvania legislature. PACER proposes to establish a Pennsylvania-specific cap and invest program setting a cap on GHG emissions from Pennsylvania's fossil fuel-fired power plants. If enacted, either the RGGI regulation or the PACER legislation could result in decreased demand or decreased prices for our coal in the Commonwealth of Pennsylvania. Additional CO₂ cap-and-trade programs, carbon taxes, or other regulatory and policy regimes, whether state, federal or international in nature, or similar business or customer-focused voluntary climate and GHG emission reduction goals could affect the future market for coal and lower overall coal demand.

Taking a different approach, in 2024, the states of New York and Vermont passed legislation requiring fossil fuel companies to make contributions to state managed "climate superfunds" established to finance the cost of repairs and upgrades to public infrastructure in response to severe weather and other climatic events. Analogous "climate superfund" legislation has also been proposed in the states of California, Massachusetts and Maryland. Modeled after the Comprehensive Environmental Response, Compensation and Liability ("CERCLA") Superfund law, the climate superfunds retroactively impose strict liabilities on fossil fuel companies determined to be responsible for GHG emissions over defined time periods and quantitative thresholds, potentially exposing businesses to substantial financial liabilities associated with historical pollution. Similarly in 2024, legislation proposing to establish the "Fossil Fuel Transportation Fee and Mitigation Fund" was introduced in the Maryland House of Delegates. The legislation would impose a fee of 30 cents per mmBtu on companies transporting fossil fuels in Maryland and would establish the "Fossil Fuel Mitigation Fund" to support activities that reduce GHG emissions in the state. Any regulations or legislation imposing fees on the production, transportation or use of the coal we produce, or, seeking damages or abatement for climate change impacts could and may have a material adverse effect on our business, financial condition and results of operations.

At both the state and federal levels, environmental organizations, third parties and regulators have challenged permitting actions associated with new fossil fuel infrastructure, power plants, pipelines and shipping terminals, citing GHG emissions, the uncertainty surrounding the economic viability of these projects under future laws limiting CO₂ emissions, or the failure to account for their climate change impacts. Challenges such as these could result in litigation, limit operational expansion efforts, create permitting delays or restrict coal shipments, any of which could materially impact production, cash flows and results of operations.

Foreign governments, including the European Union and member countries, have adopted regulations governing GHG emissions. Independent of regulation, the United Nations Framework Convention on Climate Change ("UNFCCC") seeks to establish binding GHG emission reduction requirements for developed countries. The UNFCCC's governing body, the Conference of the Parties ("COP"), meets annually to implement and refine a framework for the international Paris Agreement, a voluntary commitment to limit or reduce GHG emissions in order to limit global warming below 2 degrees Celsius from temperatures in the pre-industrial era. In December 2023, the UNFCCC convened its 28th COP and ratified the UAE Consensus which calls upon its signatories, including the United States, to achieve a 43% reduction in GHG emissions by 2030 (compared to 2019 levels) through actions such as the accelerated phase-down of unabated coal power and other measures that drive the transition away from fossil fuels in energy systems. As a result, 12 nations revised and submitted economy-wide nationally determined contributions ("NDCs") by February 10, 2025, including plans to accelerate targets aligned with the Paris Agreement's temperature goals. The majority of countries are due to publish their NDCs throughout the year ahead of the 30th COP set for November 2025. On January 20, 2025, President Donald J. Trump issued an executive order directing that the United States formally withdraw from the Paris Agreement.

Federal, state and international GHG and climate change initiatives, associated regulations or other voluntary commitments to reduce GHG emissions could significantly increase the cost of coal production and consumption, increase costs as a result of regulations requiring the installation of emissions control technologies, increase expenses associated with the purchase of emissions reduction credits to comply with future emissions trading programs, increase expenses associated with any future carbon tax, or significantly reduce coal consumption through implementation of a future clean energy standard. Such initiatives and regulations could further reduce demand or prices for our coal in both domestic and international markets, could adversely affect our ability to produce coal and to develop our reserves, could reduce the value of our coal and coal reserves, and may have a material adverse effect on our business, financial condition and results of operations.

Clean Water Act

The federal Clean Water Act (“CWA”) and corresponding state laws affect our coal and export terminal operations by regulating discharges into certain waters. CWA permits - issued either by the EPA or an analogous state agency - typically require regular monitoring and compliance with limitations on defined pollutants and impose related reporting requirements. Specific to the Company's operations, CWA permits and corresponding state laws at times include, among other requirements, (i) treatment of discharges from coal mining properties for non-traditional pollutants, such as chlorides, sulfates, selenium and dissolved solids and (ii) mandates to dispose of wastes at approved disposal facilities.

Under the CWA, citizens may sue permit holders for alleged discharges of regulated pollutants not explicitly limited by permits issued pursuant to the National Pollutant Discharge Elimination System (“NPDES”). Citizens may also sue to enforce NPDES permit requirements. Since 2012, multiple citizen suits have been filed against various coal operators, alleging violations of numeric and narrative water quality standards that broadly prohibit effects to aquatic life. While the outcome of these suits cannot be predicted, the suits seek penalties and injunctive relief that could limit future discharges or require installation of capital-intensive water treatment technologies that have high operating costs. Additional CWA requirements that could directly or indirectly affect our operations are summarized below.

Dredge and Fill Permits Under CWA Sections 401 and 404. In order to obtain a permit for certain coal mining activities, such as the construction of coal refuse areas and slurry impoundments that may result in impacts to waters of the United States, an operator may need to obtain a permit for the discharge of fill material from the Army Corps of Engineers (“ACOE”) under Section 404 of the CWA. For specific categories of activities determined to have minimal effects, the Company may be required to comply with Nationwide Permits from the ACOE. In addition, through the CWA Section 401 Certification Program, state regulators have approval authority over federal permits authorizing activities that could impact state water quality and must certify that the activity will comply with water quality standards or other applicable requirements. In 2020, the EPA issued the 2020 CWA Section 401 Certification Rule, intending to clarify the scope of state regulatory authority and, under certain circumstances, allowing the EPA to certify projects regardless of state objection. The rule was vacated by the U.S. District Court for the Northern District of California in October 2021. In June 2022, the EPA published a proposed revised section 401 certification rule expanding the role of states, territories and Tribes in the certification process. The final 2023 CWA Section 401 Water Quality Certification Improvement Rule became effective on November 27, 2023 but has been challenged by states and regulated entities to enjoin its enforcement in a lawsuit pending in the U.S. District Court for the Western District of Louisiana. On March 7, 2024, the District Court in that case denied a limited motion for preliminary injunction to enjoin enforcement of the 2023 Rule for those Section 401 certification requests submitted after the effective date of the 2020 Rule, but before the effective date of the 2023 Rule. The District Court has yet to rule on the merits of petitioners’ challenge to the 2023 Rule and it remains in effect. While the 2023 Rule is in effect, we may be required to receive explicit authorization from the ACOE and the corresponding state regulatory authority before proceeding with certain mining or export terminal activities. As a result, our operations could experience permitting delays or disapprovals or could be subject to litigation, which could have a material adverse effect on our business, results of operations, financial condition and cash flows. Due to the ongoing litigation and possibility that the EPA may revise the 2023 Rule in the future, the ultimate impact of the 2023 Rule cannot be determined at this time.

Definition of Waters of the United States. In June 2015, the EPA issued a rule to clarify which waterways are subject to federal jurisdiction under the CWA, known as the Clean Water Rule. The rule was ultimately blocked by a federal appeals court, and, in 2020, the EPA and the ACOE published the Navigable Waters Protection Rule (“NWPR”) to revise the definition of “Waters of the United States” (“WOTUS”) and to redefine which waterbodies are subject to federal jurisdiction. The NWPR was vacated by multiple U.S. District Courts, and, in January 2023, the EPA and the ACOE issued a final rule redefining WOTUS in a manner generally consistent with the pre-2015 framework (“Revised WOTUS Rule”). On May 25, 2023, the Supreme Court issued its decision in *Sackett v. EPA*, which narrowed federal jurisdiction over land and water features. When the *Sackett* decision was issued, two federal district courts had already enjoined the Revised WOTUS Rule in several states. On August 29, 2023, the EPA and the ACOE issued a final rule to amend the 2023 Revised WOTUS Rule and conform the rule with the *Sackett* decision (the “Conforming Rule”). The Conforming Rule took effect immediately upon publication on September 8, 2023. However, as a result of ongoing litigation on the Revised WOTUS Rule, the agencies are implementing the definition of “waters of the United States” under the Revised WOTUS Rule, as amended by the Conforming Rule, in 24 states, the District of Columbia and the U.S. Territories. In the other 26 states, the agencies are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime and the *Sackett* decision until further notice. Notably, the Conforming Rule itself does not define certain language from the Supreme Court's ruling and could be expanded or face additional legal challenges in the future. Further revisions to the definition of WOTUS could impose additional or different permitting obligations or restrictions, require enhanced mitigation, or cause the Company to modify its operations, any of which could result in delayed permit approval timeframes or increased operational costs and compliance burden.

Water Discharge Permits. Additionally, the Company must obtain NPDES permits from the appropriate state or federal permitting authority under Section 402 of the CWA. These permits establish effluent limitations for discharges to receiving waters that are protective of water quality standards. For discharges to receiving waters that are classified as either high-quality or impaired, stringent restrictions are established to ensure anti-degradation and compliance with water quality standards. Permitting such discharges under NPDES could increase the cost, time and difficulty of complying with permit requirements, and may warrant costly treatment that could affect our operations.

On September 26, 2023, the Sierra Club and several other environmental organizations filed a “Petition for Rulemaking to Establish a Nationwide NPDES Permit for Uncovered Railcars Transporting Coal Pursuant to 33 U.S.C. § 1342(a).” If the Petition results in final rulemaking, it could impose permitting obligations or restrictions on our rail partners and could impact the time and costs associated with the transportation of our coal. No action was taken by the EPA on the petition prior to the Biden administration leaving office.

Effluent Limitations Guidelines for the Steam Electric Power Generating Industry. The 2015 Effluent Limitations Guidelines and Standards (“ELG”) rule established the first federal limits on the levels of toxic metals in various power plant wastewater discharges and set zero-discharge requirements for certain waste streams. Portions of the rule were vacated by the U.S. Court of Appeals for the Fifth Circuit in 2019. Accordingly, revisions to the 2015 ELG rule were published in October 2020 (“Reconsideration Rule”) and established a voluntary incentive program which provides power plants until December 31, 2028 to (i) retire or (ii) implement changes required to achieve compliance with stringent effluent limits and standards. The rule is expected to significantly increase compliance costs for many coal-fired power plants and as a result, could accelerate facility closures. Certain domestic utilities, including some of our current customers, have announced plans to retire certain coal-fired power plants by 2028 as a result of the ELG rule. In May 2024, the EPA published the final Supplemental ELG Rule, which further restricts the ELGs established by the 2020 ELG Reconsideration Rule, incorporates limitations for additional waste streams that were previously excluded and establishes procedural requirements for affected facilities to demonstrate permanent cessation of coal combustion or permanent retirement.

Multiple states, trade groups and utility companies challenged the EPA’s May 2024 Supplemental ELG Rule. On October 9, 2024, the Eighth Circuit Court of Appeals denied the petitioners’ request to stay the Supplemental ELG Rule, thereby allowing the rule to go into effect while the litigation is ongoing. The decision was appealed to the Supreme Court, where it is pending while the underlying legal challenge on the merits of the rule continues. The ultimate impact of the Supplemental ELG Rule cannot be determined at this time due to uncertainty over the outcome of legal challenges. There is also the possibility that the EPA under a new administration will seek to revise or modify the rule, which would also likely face legal challenges. The legal challenge to the Supplemental ELG Rule or further revisions could impose additional or different permitting obligations or restrictions, or cause the Company to modify its operations, any of which could result in delayed permit approval timeframes or increased operational costs and compliance burden.

Other Environmental Laws and Regulations

Surface Mining Control and Reclamation Act. The federal Surface Mining Control and Reclamation Act (“SMCRA”) establishes minimum extraction, environmental, reclamation and closure standards for mining activities. While SMCRA is a comprehensive statute, it does not supersede other major statutes, such as the Clean Air Act, Clean Water Act, Endangered Species Act and other statutes discussed herein. Operators must obtain SMCRA permits and permit renewals from the U.S. Office of Surface Mining (“OSM”) or from the applicable state agency, where states have been granted regulatory primacy by demonstrating that the state’s regulatory program is at least as stringent as the federal program. Our active operations are located in states that have primary jurisdiction for enforcement of SMCRA, with oversight from OSM. The timing of SMCRA permit issuance is largely at the discretion of the regulatory authorities and is often related to the size and complexity of the operation for which approval is sought. In addition, numerous other permits from applicable state, federal or local authorities are required to conduct mining operations. Timing of permit issuance can also be influenced by public engagement in the permitting process, such as through comment, hearings or legal interventions, which could affect our operations. Permits can also be delayed, refused or revoked if any entity under common ownership or control has unabated permit violations, including the mining and compliance history of officers, directors and principal owners of the entity seeking permit approval. Under the laws applicable to our operations, substantial fines and penalties, including suspension or revocation of permits, and in severe cases, criminal sanctions, may be imposed for failure to comply.

Under federal and state laws, including SMCRA, we are required to obtain surety bonds or other acceptable security to secure payment of our long-term obligations, including mine closure and reclamation, mine water treatment, federal and state workers’ compensation costs, coal leases or other miscellaneous obligations. Surety bonds are typically renewable on a yearly basis, and it is possible that surety bond issuers may refuse to renew bonds or may demand additional collateral therefor. Over the past few years, the surety markets have been increasingly challenging, particularly for coal companies. We have experienced rising premiums, reduced coverage and/or fewer providers willing to underwrite policies and surety bonds. Terms have generally become unfavorable, including increases in the amount of collateral required to secure surety

bonds. However, more recently, we have seen insurance rates stabilize and even decrease on certain lines of coverage, as new insurance carriers have entered the market, although there is no assurance that this stabilization or decrease will be sustained or continued. Any failure to maintain, or our inability to acquire, surety bonds required by state and federal laws or the related collateral required by bond issuers, could have a material adverse effect on our ability to produce coal, adversely affecting our business, financial condition, liquidity, results of operations and cash flows. As of December 31, 2024, we posted an aggregated \$526 million in surety bonds for reclamation purposes, as well as approximately \$137 million in surety bonds, cash, and letters of credit to secure other obligations including workers compensation, black lung benefits, coal leases and other obligations.

Additionally, in October 2024, the Company and the Pennsylvania Department of Environmental Protection (“PADEP”) finalized agreements to form a Global Water Treatment Trust Fund, providing an approved alternative financial assurance mechanism for 22 legacy mine water treatment systems (“treatment systems”) in Pennsylvania. The Company intends to make annual contributions of \$2 million until the cash balance of the fund equals 100% of the present value of future operation, maintenance and recapitalization costs for the treatment systems, currently estimated to be \$74.2 million. As the cash balance of the fund grows, surety bonds associated with the treatment systems will be adjusted or released by the PADEP, thereby reducing our exposure to surety bonds and related collateral requirements. Through December 2024, the Company has contributed \$12.1 million to the fund, and the PADEP has approved bond reductions totaling \$52.7 million.

Separately, SMCRA imposes a reclamation fee on all current mining operations, the proceeds of which are deposited in the Abandoned Mine Reclamation Fund, which is used to restore mine lands mined, closed or abandoned before SMCRA’s adoption in 1977, and to pay health care benefit costs of orphan beneficiaries of the Combined Fund created by the Coal Industry Retiree Health Benefit Act of 1992. The current fee is \$0.096 per ton for underground mined coal and became effective in October 2021. We recognized expense related to Abandoned Mine Reclamation Fund fees of \$2 million for the year ended December 31, 2024.

Endangered Species Act. The federal Endangered Species Act (“ESA”) and other related federal and state statutes protect species that have been classified as endangered or threatened with possible extinction, or other protective designations. A number of species native to our operating areas are protected under the ESA or other related laws and regulations. Protection of these species could prohibit or delay authorization of mining activities or may place additional restrictions on our operations related to timbering, construction, vegetation or water discharges. In May 2024, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (collectively, the “Services”) promulgated final regulations to rescind and revise the regulations and definitions finalized under the previous administration, related to procedures for listing threatened and endangered species and agency consultation. Imposition of more stringent or protective measures, or designation of additional critical habitat areas, could expose our operations to additional requirements, increased operating costs or delayed approval timeframes.

National Environmental Policy Act. The National Environmental Policy Act (“NEPA”) requires federal agencies to assess the environmental effects of their proposed actions, prior to taking a “major Federal action,” which encompasses agencies’ decisions on certain permitting applications that fall under federal jurisdiction. Agencies generally must issue either an Environmental Impact Statement (“EIS”) or an Environmental Assessment (“EA”), including an evaluation of direct and indirect impacts associated with GHG emissions and the effects of climate change compared to reasonable alternatives, including a no action alternative. The White House Council on Environmental Quality (“CEQ”) has been responsible for issuing regulations that generally govern the implementation of NEPA, although individual agencies can issue their own rules. On November 12, 2024, the D.C. Circuit issued a decision in *Marin Audubon Society et al. v. FAA et al.*, holding that CEQ lacked statutory authority to issue NEPA rules. The ultimate effect of this ruling on the future implementation of NEPA and the burdens the law will impose are, at this time, unclear. When applicable to federal permit applications required for mining, NEPA reviews may create delays in authorization timeframes, increase the cost of compliance, risk denial of a permit application or give rise to litigation risk, which could materially impact our operations.

Comprehensive Environmental Response, Compensation, and Liability Act. The CERCLA imposes remediation requirements related to actual or threatened releases of hazardous substances into the environment. Under CERCLA or related state laws, joint and several liability may be imposed on generators of hazardous waste, site owners, waste transporters or others regardless of fault associated with the original disposal activity. Although the EPA excludes most wastes generated during coal mining and processing from hazardous waste laws, such wastes may contain hazardous substances that are governed by CERCLA if released into the environment. Our current operations, operations of our predecessors, or facilities to which we have sent waste materials could be subject to liability under CERCLA.

Resource Conservation and Recovery Act. The federal Resource Conservation and Recovery Act (“RCRA”) and corresponding state laws and regulations affect coal mining by imposing requirements for the treatment, storage, transportation and disposal of certain wastes created throughout the coal mining process. Certain waste streams created throughout the mining process, such as coal refuse and coal cleaning wastes, are excluded from the regulatory definition of hazardous waste. Further, coal operations authorized under SMCRA are exempt from RCRA permitting requirements.

Coal Combustion Residuals. Byproducts of coal combustion, or coal combustion residuals (“CCR”), are regulated under RCRA. In April 2015, the EPA published regulations for the disposal of CCR (the “2015 CCR Rule”) and classified CCR as “non-hazardous” waste. The CCR Rule was subject to legal challenge and in 2018, the D.C. Circuit remanded the rule at the EPA's request. In August 2020, the EPA published a final revised rule mandating closure of unlined impoundments, with deadlines to initiate closures between 2021 and 2028, depending on site-specific circumstances. Provisions exempting inactive impoundments at inactive facilities from the CCR Rule were vacated by the D.C. Circuit in 2018, and the EPA proposed additional rules addressing those specific provisions in May 2023. In 2022 and 2023, the EPA denied requests from the majority of CCR facilities that sought approval to continue disposal of CCR and non-CCR waste streams, and instead required the facilities to cease receipt of waste within 135 days of completion of public comment. Future determinations of the same nature, or similar actions in expected future rulemakings, could lead to accelerated, abrupt, or unplanned suspension of coal-fueled EGUs. The CCR rules impose new requirements that would generally increase the cost of CCR management or require facility closure. The combined effect of the CCR rules and ELG regulations (discussed above) has compelled power-generating companies to close existing ash ponds and may force the closure of certain existing coal-burning power plants that cannot comply with the new standards. Such retirements may adversely affect the demand for our coal.

Other Environmental Regulations. We are required to comply with other state, federal and local environmental laws in addition to those discussed above. These laws include, for example, the Safe Drinking Water Act, the Emergency Planning and Community Right to Know Act, the Toxic Release Inventory, and the rules governing the use and storage of explosives regulated by the U.S. Bureau of Alcohol, Tobacco, and Firearms and the Department of Homeland Security.

Health and Safety Laws

Mine Safety. Legislative and regulatory changes have required us to purchase additional safety equipment, construct stronger seals to isolate mined-out areas, and engage in additional training. We have also experienced more aggressive inspection protocols and with new regulations, the volume of civil penalties has increased. Recent actions taken by federal and state governments include requiring:

- the caching of additional supplies of self-contained self-rescuer devices underground;
- the purchase and installation of electronic communication and personal tracking devices underground;
- the purchase and installation of proximity detection devices on continuous miner machines;
- the placement of refuge chambers, which are structures designed to provide refuge for groups of miners during a mine emergency when evacuation from the mine is not possible, which will provide breathable air for 96 hours;
- the purchase of new fire-resistant conveyor belting underground;
- additional training and testing that creates the need to hire additional employees;
- more stringent rock dusting requirements; and
- the purchase of personal dust monitors for collecting respirable dust samples from certain miners.

In September 2015, MSHA published proposed rules for underground coal mining operations concerning proximity detection systems for coal hauling machines and scoops. The rulemaking record for this proposed rule was closed in December 2016, but in January 2017, MSHA published a notice reopening the record and extending the comment period for this proposed rule for 30 days. MSHA has not issued a final rule regarding these proposed rules.

Black Lung Legislation. Under federal black lung benefits legislation, each coal mine operator is required to make payments of black lung benefits or contributions to:

- current and former coal miners totally disabled from black lung disease;
- certain survivors of miners who have died from black lung disease; and
- a trust fund for the payment of benefits and medical expenses to claimants whose last mine employment was before January 1, 1970, where no responsible coal mine operator has been identified for claims (where a miner's last coal employment was after December 31, 1969), or where the responsible coal mine operator has defaulted on the payment of such benefits. The trust fund is funded by an excise tax on U.S. production of coal, at a rate of up to \$1.10 per ton for deep mined coal and up to \$0.55 per ton for surface-mined coal, neither amount to exceed 4.4% of the gross sales price. In January 2022, these rates expired and reverted back to pre-2008 levels, at \$0.50 per ton for deep mined coal and \$0.25 per ton for surface-mined coal, neither amount to exceed 2.0% of the gross sales price. However, the Inflation Reduction Act of 2022 made the higher rates (of up to \$1.10 per ton for deep

mined coal and up to \$0.55 per ton for surface-mined coal) permanent, effective in October 2022. The Company recognized expense related to the Black Lung Excise Tax of \$11.0 million, \$10.9 million and \$8.6 million for the years ended December 31, 2024, 2023 and 2022, respectively.

In December 2021, the Government Accountability Office (“GAO”) published a report entitled “Black Lung Benefits Program: Continued Inaction on Coal Operator Self-Insurance Increases Financial Risk to Trust Fund.” This report notes that the Department of Labor (“DOL”) took certain steps to improve its oversight of self-insured coal mine operators, but these efforts were complicated by the COVID-19 pandemic. The GAO states in the report that the DOL has not taken necessary action to prevent additional benefit liabilities from being transferred to the trust fund and recommends that the DOL act on recommendations made in 2020. In January 2023, the Office of Workers' Compensation Programs (“OWCP”) issued a Notice of Proposed Rulemaking to update its regulations authorizing coal producers to self-insure and for determining appropriate security amounts, and that it plans to solicit public comments for that proposal. A change in requirements for security posted for coal operator self-insurance could result in the Company being required to post additional security for its obligations.

In December 2024, the OWCP issued a final rule revising the regulations under the Black Lung Benefits Act related to self-insurance by coal mine operators. Under the new standard, self-insured coal mine operators are required to post additional security for the Black Lung benefit liabilities. The final rule requires a security amount equal to 100% of a self-insured operator's projected black lung liabilities. The rule became effective on January 13, 2025, and operators are required to remit the increased security amount within one year. The final rule, including any assessments, is subject to appeal.

The Patient Protection and Affordable Care Act (“PPACA”) made two changes to the Federal Black Lung Benefits Act. First, it provided changes to the legal criteria used to assess and award claims by creating a legal presumption that miners are entitled to benefits if they have worked at least 15 years in underground coal mines, or in similar conditions, and suffer from a totally disabling lung disease. To rebut this presumption, a coal company would have to prove that a miner did not have black lung or that the disease was not caused by the miner's work. Second, it changed the law so black lung benefits will continue to be paid to dependent survivors when the miner passes away, regardless of the cause of the miner's death. The changes have increased the cost to us of complying with the Federal Black Lung Benefits Act. In addition to the federal legislation, we are also liable under various state statutes for our portion of black lung claims.

Other State and Local Laws Related to Our Coal Business

Ownership of Coal Rights. The Company acquires ownership or leasehold rights to coal properties prior to conducting operations on those properties. As is customary in the coal industry, we have generally conducted only a summary review of the title to coal rights that are not in our development plans, but which we believe we control. This summary review is conducted at the time of acquisition or as part of a review of our land records to determine control of coal rights. Given our experience as a coal producer, we believe we have a well-developed ownership position relating to our coal control. Prior to the commencement of development operations on coal properties, we conduct a thorough title examination and perform curative work with respect to significant defects. We generally will not commence operations on a property until we have cured any material title defects on such property. We are typically responsible for the cost of curing any title defects. We have completed title work on substantially all of our coal producing properties and believe that we have satisfactory title to our producing properties in accordance with standards generally accepted in the industry.

Available Information

We maintain a website at www.corenaturalresources.com. We will make available, free of charge, on this website our future annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act, as soon as reasonably practicable after such reports are available, electronically filed with, or furnished to the SEC, and are also available at the SEC's website, www.sec.gov. Apart from SEC filings, we also use our website to publish information which may be important to investors, such as presentations to analysts.

ITEM 1A. Risk Factors

You should carefully consider the following risks and other information in this Annual Report on Form 10-K in evaluating us and our common stock. The risk factors have been separated into three groups: risks related to our business, risks related to our common stock and the securities market and risks related to our merger with Arch.

Any of the following risks could materially and adversely affect our financial condition, results of operations or cash flows. Our operations could be affected by various risks, many of which are beyond our control. Based on current information, we believe that the following list identifies the most significant risk factors (not necessarily in order of importance or probability of occurrence) that could affect our financial condition, results of operations or cash flows. There may be additional risks and uncertainties that adversely affect our financial condition, results of operations or cash flows in the future that are not presently known, are not currently believed to be material, or are not identified below because they are common to all businesses. Past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods. For more information, see “Forward-Looking Statements.”

Risk Factors Summary

The following is a summary of the principal risks that could adversely affect our business, operations and financial results:

Risks Related to Our Business

- deterioration in economic conditions in any of the industries in which our customers operate may decrease demand for our products, impair our ability to collect customer receivables and impair our ability to access capital;
- volatility and wide fluctuation in coal prices based upon a number of factors beyond our control including future plans to eliminate coal-fired generation facilities, oversupply relative to the demand available for our products, weather and the price and availability of alternative fuels;
- an extended decline in the prices we receive for our coal affecting our operating results and cash flows;
- our customers extending existing contracts or not entering into new long-term contracts for coal on favorable terms;
- our reliance on major customers;
- decreases in demand and changes in coal consumption patterns of industrial end users, metallurgical coal users and electric power generators;
- decreases in steel production from blast furnaces or advancement of alternative steel production technologies;
- the availability and reliability of transportation facilities and other systems, disruption of rail, barge, processing and transportation facilities and other systems that deliver our coal to market and fluctuations in transportation costs;
- the risks and uncertainties arising from a significant portion of our production being sold in international markets and complying with foreign laws and regulations, including anti-corruption laws;
- the impact of potential, as well as any adopted, regulations to address pollution and climate change, including any requirements relating to greenhouse gas emissions, on our operating costs as well as on the market for coal;
- the risks inherent in coal operations, including being subject to unexpected disruptions caused by adverse geological conditions, equipment failure, delays in moving out longwall equipment, railroad derailments, security breaches or terroristic acts and other hazards, delays in the completion of significant construction or repair of equipment, fires, explosions, seismic activities, accidents and weather conditions;
- the potential for liabilities arising from environmental contamination or alleged environmental contamination in connection with our past or current coal operations;
- uncertainties in estimating our economically recoverable coal reserves;
- failure to obtain or renew surety bonds or insurance coverage on acceptable terms;
- exposure to employee-related long-term liabilities; and
- the risk of our debt agreements, our debt, access to capital markets and changes in interest rates affecting our operating results and cash flows.

Risks Related to Our Common Stock and the Securities Market

- uncertainty with respect to the Company's common stock, potential stock price volatility and future dilution;
- the consequences of a lack of, or negative, commentary about us published by securities analysts and media;
- uncertainty regarding the timing of any dividends we may declare;
- uncertainty as to whether we will repurchase shares of our common stock;
- restrictions on the ability to acquire us in our certificate of incorporation, bylaws and Delaware law and the resulting effects on the trading price of our common stock; and
- inability of stockholders to bring legal action against us in any forum other than the state courts of Delaware.

Risks Related to Our Merger with Arch

- uncertainties associated with the Merger may cause a loss of management personnel and other key employees;
- disruption of the Company's business relationships due to uncertainty associated with the Merger;
- incurrence of significant costs in connection with the Merger and integration of Arch with the Company;
- failure to integrate the businesses and operations of the Company and Arch successfully in the expected time frame; and
- failure to realize all of the anticipated benefits of the Merger.

Risks Related to Our Business

Deterioration in the global economic conditions in any of the industries in which our customers operate, or a worldwide financial downturn, or negative credit market conditions may have a materially adverse effect on our liquidity, results of operations, cash flows, business and financial condition that we cannot predict.

Weakness in the economic conditions of any of the industries we serve or that are served by our customers could adversely affect our business, financial condition, results of operations, cash flows and liquidity in a number of ways. For example:

- demand for electricity in the United States is impacted by industrial production, which, if weakened, would negatively impact the revenues, margins and profitability of our coal business;
- demand for metallurgical coal depends on coke and steel demand in the United States and globally, which, if weakened, would negatively impact the revenues, margins and profitability of our metallurgical coal business or our thermal coal as higher priced high volatile metallurgical coal;
- demand for coal used in industrial applications depends on demand for products such as cement and brick used in construction and infrastructure projects, which, if weakened, would negatively impact the revenues, margins and profitability of our coal business;
- the tightening of credit or lack of credit availability to our customers could adversely affect our ability to collect our trade receivables;
- our ability to access the capital markets may be restricted at a time when we would like, or need, to raise capital for our business including for exploration and/or development of our coal reserves, or for strategic acquisitions of assets; and
- a decline in our creditworthiness, which may require us to post letters of credit, cash collateral or surety bonds to secure certain obligations, all of which would have an adverse effect on our liquidity.

Prices for coal are volatile and can fluctuate widely based upon a number of factors beyond our control including oversupply relative to the demand available for our coal, weather, the price and availability of alternative fuels and plans by electricity generators to shut down or move away from coal-fired generation. A substantial or extended decline in the prices we receive for our coal will adversely affect our business, results of operations, financial condition and cash flows.

Our financial results are significantly affected by the prices we receive for our coal and depend, in part, on the margins that we receive on sales of our coal. Our margins reflect the price we receive for our coal over our cost of producing and transporting our coal. Prices and quantities under our multi-year sales contracts are generally based on expectations of future coal prices at the time the contract is entered into, renewed, extended or re-opened. The expectation of future prices for coal depends upon many factors. In addition, demand can fluctuate widely due to a number of matters beyond our control, including:

- the market price for coal;
- changes in the consumption pattern of industrial consumers, electricity generators and residential end-users of electricity;
- weather conditions in our markets which affect the demand for thermal coal;
- competition from other coal suppliers;
- the price and availability of alternative fuels and sources for electricity generation, especially natural gas and renewable energy sources;
- with respect to thermal coal, the price and availability of natural gas and the price and supply of imported liquefied natural gas, and competing sources of energy used in certain industrial applications, such as petroleum coke and metallurgical coal;
- technological advances affecting energy consumption and those related to hydrogen-based steel production;
- with respect to metallurgical coal, the overall demand for steel which may be affected by competition for production of steel from non-coal sources, including electric arc furnaces or other processes that may use alternatives to coking as a reduction agent, which may limit demand for coking coal;
- the costs, availability and capacity of transportation infrastructure;

- overall domestic and global economic conditions, including the supply of and demand for domestic and foreign coal;
- international developments impacting supply of thermal and metallurgical coal, including supply side reforms promulgated in China, and continued expected growth in demand for seaborne metallurgical coal in India;
- the imposition of tariffs, quotas, trade barriers and other trade protection measures; and
- the impact of domestic and foreign governmental laws and regulations, including environmental and climate change regulations and regulations affecting the coal mining industry, blast furnaces, and coal-fired power plants, and delays in the receipt of, failure to receive, failure to maintain or revocation of necessary governmental permits.

Any significant downtime of our major pieces of equipment at our strategic operations, or any inability to obtain equipment, parts and raw materials in a timely manner, in sufficient quantities or at reasonable costs, could impair our ability to satisfy our customer obligations and materially and adversely affect our results of operations.

We depend on several major pieces of mining equipment to produce, transport and prepare our coal for our customers, including, but not limited to, longwall mining systems, continuous mining units, our preparation plants and related facilities, conveyors and transloading facilities. If any of these pieces of equipment or facilities suffered major damage or were destroyed by fire, abnormal wear, flooding, incorrect operation or otherwise, we may be unable to replace or repair them in a timely manner or at a reasonable cost, which would impact our ability to produce and transport coal and materially and adversely affect our business, results of operations, financial condition and cash flows. We procure this equipment from a concentrated group of suppliers, and obtaining this equipment often involves long lead times. Occasionally, demand for such equipment by mining companies can be high and some types of equipment may be in short supply. Delays in receiving or shortages of this equipment or the cancellation of our supply contracts under which we obtain equipment could limit our ability to obtain these supplies or equipment. Disruptions in supply chains, increased demand and other factors have recently led to increases in these lead times and delays, which could reduce our production and therefore adversely affect our results of operations, financial condition and cash flows.

Additionally, coal production, transportation and preparation consumes large quantities of commodities including steel, copper, explosives, rubber products and liquid fuels and requires the use of capital equipment. We also use significant amounts of diesel fuel, explosives and tires for trucks and other heavy machinery, particularly at our Black Thunder mining complex. Some commodities, such as steel, are needed to comply with roof control plans required by regulation. The prices we pay for commodities and capital equipment are strongly impacted by the global market. A rapid or significant increase in the costs of commodities or capital equipment we use in our operations, whether as a result of increased demand, shortages caused by supply chain disruptions or general inflationary pressures, could impact our mining operating costs because we may have a limited ability to negotiate lower prices, and, in some cases, may not have a ready substitute. In addition, if any of our suppliers experiences an adverse event, or decides to no longer do business with us, we may be unable to obtain sufficient equipment and raw materials in a timely manner or at a reasonable price to allow us to meet our production goals and our revenues may be adversely impacted. We use considerable quantities of steel in the mining process. If the price of steel or other materials increases substantially, the risk of which is currently elevated due to economy-wide high inflation, or if the value of the U.S. dollar declines relative to foreign currencies with respect to certain imported supplies or other products, our operating expenses could increase. Any of the foregoing events could materially and adversely impact our business, financial condition, results of operations and cash flows.

If our coal customers do not extend existing contracts or do not enter into new multi-year coal sales contracts on favorable terms, profitability of our operations could be adversely affected.

During the year ended December 31, 2024, approximately 43% of the coal the Company produced was sold under multi-year sales contracts. If a substantial portion of our multi-year sales contracts are modified or terminated, if force majeure is exercised, or if we are unable to replace or extend the contracts or new contracts are priced at lower levels, our profitability would be adversely affected. In addition, if customers refuse to accept shipments of our coal for which they have existing contractual obligations, our revenues will decrease and we may have to reduce production at our mines until such customers honor their contractual obligations and begin accepting shipments of our coal again.

The profitability of our multi-year sales coal supply contracts depends on a variety of factors, which vary from contract to contract and fluctuate during the contract term, including our production costs and other factors. Price changes, if any, provided in long-term supply contracts may not reflect our cost increases, and therefore, increases in our costs may reduce our profit margins. In addition, during periods of declining market prices, provisions in our long-term coal contracts for adjustment or renegotiation of prices and other provisions may increase our exposure to short-term coal price and electric power price volatility. As a result, we may not be able to obtain long-term agreements at favorable prices compared to either market conditions, as they may change from time to time, or our cost structure, which may reduce our profitability.

We have customer concentration, so the loss of, or significant reduction in, purchases by our largest coal customers could adversely affect our business, financial condition, results of operations and cash flows.

Although we have recently begun selling a significant portion of our coal in the export market, we remain somewhat exposed to risks associated with a concentrated customer base both domestically and globally. Historically, we derived a significant portion of our revenues from two customers, each of which accounted for over 10% of our total sales and aggregated approximately 22% of our total sales in fiscal year 2024. Similarly, prior to the Merger, Arch derived approximately 16% of its total coal revenues from sales to its three largest customers in the year ended December 31, 2024. Although the Merger has increased our customer base, there can be no guarantee that we will not still be exposed to the risks associated with a concentrated customer base.

There are inherent risks whenever a significant percentage of total revenues are concentrated with a limited number of customers. Revenues from our largest customers may fluctuate from time to time based on numerous factors, including market conditions, which may be outside of our control. If any of our largest customers experience declining revenues due to market, economic or competitive conditions, we could be pressured to reduce the prices that we charge for our coal, which could have an adverse effect on our margins, profitability, cash flows and financial position. If any customers were to significantly reduce their purchases of coal from us, including by failing to buy and pay for coal they committed to purchase in sales contracts, our business, financial condition, results of operations and cash flows could be adversely affected.

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

Our ability to collect payments from our customers for coal sold and delivered could be impaired if their creditworthiness declines or if they fail to honor their contracts. Because a significant portion of our sales are concentrated to a few material customers, if the creditworthiness of a significant customer declines or the customer significantly delays payments to us, our business, cash flows and financial condition could be materially and adversely affected. If we determine that a customer is not creditworthy, we may be able to withhold delivery under the customer's coal sales contract. However, 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, if customers refuse to accept shipments of our coal for which they have an existing contractual obligation or if we terminate a relationship with a significant customer due to credit risks, our revenue could decrease materially and we may have to reduce production at our mines until our customers' contractual obligations are honored or we are able to replace a significant customer. In addition, our borrowing capacity under our receivables financing arrangement could be reduced if we experience prolonged and significant delays in payments by one or more material customers.

Also, our customer base may change with deregulation as domestic utilities sell their power plants to their non-regulated affiliates or third parties that may be less creditworthy, thereby increasing the risk we bear for customer payment default. Some power plant owners may have credit ratings that are below investment grade or may become below investment grade after we enter into contracts with them. Furthermore, our metallurgical customers operate in a highly competitive and cyclical industry where their creditworthiness could deteriorate rapidly.

Our inability to acquire or develop additional coal reserves that are economically recoverable may have a material adverse effect on our future profitability.

Our profitability depends substantially on our ability to mine, in a cost-effective manner, coal reserves that possess the quality characteristics that our customers desire. Because our reserves decline as we mine our coal, our future profitability depends upon our ability to acquire additional coal reserves and surface land needed to ensure the reserves are economically recoverable to replace the reserves we produce. If we fail to acquire, gain access to or develop sufficient additional reserves over the long term to replace the reserves depleted by our production, our existing reserves will eventually be depleted, which may have a material adverse effect on our business, financial condition, results of operations and cash flows.

Decreases in coal consumption patterns for steel production, electricity generation and industrial applications could adversely affect our business.

Our business is closely linked to demand for electricity, and any changes in coal consumption by U.S. or international electric power generators would likely impact our business over the long term. According to the EIA, in 2024, the domestic electric power sector accounted for approximately 91% of total U.S. coal consumption. In 2024, the Pennsylvania Mining Complex sold approximately 41% of its coal to U.S. electric power generators, and we have annual or multi-year contracts in place with many of these electric power generators for a significant portion of our future production. The amount of coal consumed by the electric power generation industry is affected by, among other things:

- general economic conditions, particularly those affecting industrial electric power demand, such as a downturn in the U.S. or international economy and financial markets;
- overall demand for electricity;
- indirect competition from alternative fuel sources for power generation, such as natural gas, fuel oil, nuclear, hydroelectric, wind and solar power, and the location, availability, quality and price of those alternative fuel sources;
- environmental and other governmental regulations, including those impacting coal-fired power plants;
- energy conservation efforts and related governmental policies; and
- other corporate environmental, social or governance initiatives to reduce dependency on and/or consumption of fossil fuels.

Changes in the coal industry that affect our customers, such as those caused by decreased electricity demand and increased competition, could also adversely affect our business. Indirect competition from natural gas-fired plants that are relatively more efficient, less expensive to construct and less difficult to permit than coal-fired plants has displaced a significant amount of coal-fired electric power generation and may continue to do so in the near term, particularly older, less efficient coal-fired power generators. Federal and state mandates for increased use of electricity derived from renewable energy sources could also affect demand for our coal. Such mandates, combined with other incentives to use renewable energy sources, such as tax credits, could make alternative fuel sources more competitive with coal. A decrease in coal consumption by the electric power generation industry could adversely affect the price of coal, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Other factors, such as efficiency improvements associated with new appliance standards in the buildings sectors and overall improvement in the efficiency of technologies powered by electricity, have slowed electricity demand growth and may contribute to slower growth in the future. Further decreases in the demand for electricity, such as decreases that could be caused by a worsening of current economic conditions, a prolonged economic recession, government-imposed lockdowns designed to slow or contain the spread of contagious diseases or other similar events, could have a material adverse effect on the demand for coal and on our business over the long term.

Coal sold into the industrial markets is used in the cement and brick manufacturing process. Any deterioration in the U.S. or foreign cement and brick industries, including a decrease in demand for such products or concerns regarding the continued financial viability of these industries, could reduce the demand for our coal sold into those markets and could adversely impact the creditworthiness of our U.S. or foreign industrial customers and our ability to receive timely payments from these customers. In addition, we compete heavily against the price of petroleum coke into these industries and as the price of petroleum coke changes, that could positively or negatively affect our financial condition, results of operations and cash flows.

The metallurgical coal that we produce from the PAMC and the Itmann Mining Complex is sold to domestic and export customers involved in the production of steel. In addition, Arch's principal product is a premium High-Vol metallurgical coal for blast furnace steel producers. Any deterioration in conditions in the U.S. or foreign steel industries, including a decrease in demand for steel or concerns regarding the continued financial viability of the industry, could reduce the demand for our metallurgical coal and could adversely impact the creditworthiness of our U.S. or foreign metallurgical coal customers and our ability to receive timely payments from these customers. In addition, the steel industry's demand for coal is affected by a number of factors, including the variable nature of that industry's business, technological developments in the steel-making process and the availability of substitutes for steel, such as aluminum, composites or plastics. When steel prices are lower, the prices that we charge steel industry customers for our metallurgical coal may decline, which could adversely affect our financial condition, results of operations and cash flows.

Also, premium High-Vol metallurgical coal generally commands a price premium over other forms of coal because of its value in use in blast furnaces for steel production. Premium High-Vol metallurgical coal has specific physical and chemical properties that can impact the efficiency of blast furnace operation. Alternative technologies are continually being investigated and developed with a view to reducing production costs or for other reasons, such as minimizing environmental or social impact. If competitive technologies emerge or are increasingly utilized that use other materials in place of our product or that diminish the required amount of our product, such as electric arc furnaces or pulverized coal injection processes, demand and price for our metallurgical coal might fall. Many of these alternative technologies are designed to use lower quality coals or other sources of carbon instead of higher cost High-Vol metallurgical coal. While conventional blast furnace technology has been the most economic large-scale steel production technology for several decades, and while emergent technologies typically take many years to commercialize, there can be no assurance that, over the longer term, competitive technologies not reliant on High-Vol metallurgical coal could emerge which could reduce demand and price premiums for High-Vol metallurgical coal.

The availability and reliability of modes of transportation and transportation facilities as well as fluctuations in transportation costs could affect the demand for our coal, and any significant damage to the CONSOL Marine Terminal that impacts its use could impair our ability to supply coal to our customers.

Transportation logistics play an important role in allowing us to supply coal to our customers. Any significant delays, interruptions or other limitations on the ability to transport our coal could negatively affect our operations. Our coal is transported from our mines primarily by rail. To reach markets and end customers, our coal may also be transported by barge or by ocean vessels loaded at terminals, including our CONSOL Marine Terminal and DTA, in which we own a 35% interest following the Merger. Disruption of transportation services because of weather-related problems, strikes, lock-outs, terrorism, governmental regulation, third-party action or other events could temporarily impair our ability to supply coal to customers and adversely affect our profitability. For example, after a container ship struck a support column of the Francis Scott Key Bridge in Baltimore, Maryland causing it to collapse on March 26, 2024, vessel access in and out of the CONSOL Marine Terminal, which is located in the Port of Baltimore, was suspended. Until a channel was opened to normal operations on June 10, 2024, our inability to ship coal to our customers from the CONSOL Marine Terminal temporarily negatively impacted our business, financial condition and results of operations. In addition, transportation costs represent a significant portion of the delivered cost of coal and, as a result, the cost of delivery is a critical factor in a customer's purchasing decision. Increases in transportation costs, including increases resulting from emission control requirements and fluctuation in the price of diesel fuel and demurrage, could make our coal less competitive. Any disruption of the transportation services we use or increase in transportation costs could have a materially adverse effect on our business, financial condition, results of operations and cash flows. Disruption in shipment levels over longer periods of time at the CONSOL Marine Terminal could cause our customers to look to other sources for their coal needs, negatively affecting our revenues and results of operations.

Competition within the coal industry may adversely affect our ability to sell coal. Increased competition or a loss of our competitive position could adversely affect our sales of, or prices for, our coal, which could impair our profitability. In addition, foreign currency fluctuations could adversely affect the competitiveness of our coal abroad.

We compete with other producers primarily on the basis of price, coal quality, transportation costs and reliability of delivery. We compete with coal producers in various regions of the United States and with some foreign coal producers for domestic sales primarily to electric power generators. We also compete with both domestic and foreign coal producers for sales in international markets. Demand for our coal by our principal customers is affected by the delivered price of competing coals, other fuel supplies such as natural gas and petcoke, and alternative generating sources, including nuclear, natural gas, oil and renewable energy sources, such as hydroelectric, wind and solar power.

We sell coal to foreign industrial end-users, electricity generators and to the more specialized metallurgical coal market, which are significantly affected by international demand and competition. The coal industry has experienced consolidation in recent years, including consolidation among some of our major competitors. As a result, a substantial portion of coal production is from companies that have significantly greater resources than we do. Current or further consolidation in the coal industry or current or future bankruptcy proceedings of coal competitors may adversely affect us. In addition, increases in coal prices could encourage existing producers to expand capacity or could encourage new producers to enter the market. If overcapacity results, the prices of and demand for our coal could significantly decline, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

In addition, we face competition from foreign producers that sell their coal in the export market. Potential changes to international trade agreements, trade concessions or other political and economic arrangements may benefit coal producers operating in countries other than the United States. We may be adversely impacted on the basis of price or other factors with companies that in the future may benefit from favorable foreign trade policies or other arrangements. In addition, coal is sold internationally in U.S. dollars and, as a result, general economic conditions in foreign markets and changes in foreign currency exchange rates may provide our foreign competitors with a competitive advantage. If our competitors' currencies decline against the U.S. dollar or against our foreign customers' local currencies, those competitors may be able to offer lower prices for coal to our customers. Furthermore, if the currencies of our overseas customers were to significantly decline in value in comparison to the U.S. dollar, those customers may seek decreased prices for the coal we sell to them. Consequently, currency fluctuations could adversely affect the competitiveness of our coal in international markets, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Inflation could result in higher costs and decreased profitability.

The United States, European Union and other large economies have recently experienced inflation at a rate significantly higher than recent years. While inflation has been easing, there can be no guarantee that this trend will continue. Current and future inflationary effects may be driven by, among other things, governmental stimulus and monetary policies, supply chain disruptions and geopolitical instability. This recent inflation has resulted in rising prices, including increases in freight rates, prices for energy and other costs, and has adversely impacted us and may further impact us negatively in the future. Sustained inflation could result in higher costs for transportation, energy, materials, supplies and labor. Our efforts to recover inflation-based cost increases from our customers may be hampered as a result of the structure of our contracts and the contract bidding process as well as competitive pressure in the industry, economic conditions and the countries to which we sell our export coal. Accordingly, substantial inflation may have an adverse impact on our business, financial position, results of operations and cash flows. Inflation has also resulted in higher interest rates in the U.S., which could increase our cost of debt borrowing in the future.

A significant portion of our production is sold in international markets and our international sales may continue to grow, which exposes us to additional risks and uncertainties.

For the fiscal years ended December 31, 2024, 2023 and 2022, approximately 60%, 66% and 53%, respectively, of our annual coal revenue was derived from customers who exported our coal outside of the United States. A majority of Arch's metallurgical coal sales consist of sales to international customers, and we expect that international sales will continue to account for a large portion of our revenue. We believe that international markets will continue to account for a significant percentage of our revenue as we seek international expansion opportunities. The international markets are subject to a number of material risks, including, but not limited to:

- changes in a specific country's or region's political, economic or other conditions;
- changes in U.S. government policy with respect to these foreign countries may inhibit export of our products and limit potential customers' access to U.S. dollars in a country or region in which those potential customers are located;
- we may experience difficulties in enforcing our legal contracts or the collecting of foreign accounts receivable in a timely manner and we may be forced to write off these receivables;
- longer sales cycles and time to collection may produce large swings in working capital from period to period;
- tariffs and other international trade barriers may make our products less cost competitive;
- government currency controls;
- potentially adverse tax consequences to our customers may damage our cost competitiveness;
- customs, import/export and other regulations of the countries in which our international customers are located may adversely affect our business;
- currency fluctuations may make our coal less cost competitive, affecting overseas demand for our coal, or may indirectly expose us to currency fluctuation risk;
- geopolitical uncertainty or turmoil, including terrorism, war and natural disasters; and
- unexpected changes in diplomatic and trade relationships.

Our sales are also affected by general economic conditions in our international markets. A prolonged economic downturn in international markets could have a material adverse effect on our business. Negative developments in one or more countries or regions in which our coal is exported could result in a reduction in demand for our coal, the cancellation or delay of orders already placed, difficulties in delivering our products, difficulty in collecting receivables or a higher cost of doing business, any of which could negatively impact our business, financial condition, cash flows and results of operations. In addition, we may be exposed to legal risks under the laws of the countries outside the U.S. in which we do business, as well as the laws of the U.S. governing our business activities in those other countries, such as the U.S. Foreign Corrupt Practices Act.

The Company intends, if possible, to offset any potential adverse impact from various international risks (for example, tariffs) that may be imposed by governments in the countries in which one or more of the Company's end users are located by reallocating its customer base to other countries or to the domestic U.S. markets.

Compliance with import and export requirements, the Foreign Corrupt Practices Act and other applicable anti-corruption laws may increase the risks of doing business internationally.

Because we sell a significant portion of our production in international markets, our operations and activities inside and outside the U.S., as well as the shipment of our products across international borders, require us to comply with a number of federal, state, local and foreign laws and regulations, which are complex and increase our risks of doing business internationally. These laws and regulations include import and export requirements, tariffs and other international trade barriers, government currency controls, economic sanction laws, customs laws, tax laws and anti-corruption laws, such as the U.S. Foreign Corrupt Practices Act and the U.K. Bribery Act. In addition, we have sales offices in Singapore and the United Kingdom which sell our coal to new international customers, which may present uncertainties and new risks, including potential liability under foreign anti-corruption and other laws. We cannot predict how these laws or their interpretation, administration and enforcement will change over time. There can be no assurance that our employees, contractors, agents, distributors, customers, payment parties or third parties working on our behalf will not take actions in violation of these laws. Any such violation could result in substantial fines, sanctions, civil and/or criminal penalties and curtailment of operations in certain jurisdictions, and might adversely affect our business, financial condition, results of operations and cash flows. In addition, actual or alleged violations could damage our reputation and ability to do business. Furthermore, detecting, investigating and resolving actual or alleged violations is expensive and can consume significant time and attention of our senior management.

The characteristics of coal may make it costly for electric power generators and other coal users to comply with various environmental standards regarding the emissions of impurities released when coal is burned, which could cause our customers to replace coal with alternative fuels.

Coal contains impurities, including sulfur, mercury, chlorine and other elements or compounds, many of which are released into the air along with fine particulate matter, nitrogen oxides and carbon dioxide when it is burned. Complying with regulations on these emissions can be costly for our customers, including those in the industrial, metallurgical and power generation markets. In order to comply with emissions standards promulgated under the federal Clean Air Act or similar state regulations seeking to limit the emissions that are generated as a result of coal combustion, coal users could be required to install costly emissions control devices, use or purchase emission credits or allowances, curtail operations or switch to other fuels, each of which has limitations. Because thermal coal currently accounts for a significant portion of our sales, our results could be materially affected by the extent to which our customers incur costs associated with controlling or limiting emissions from the use of coal or switch to alternative fuels. Rulemakings such as the Cross State Air Pollution Rule (“CSAPR”), the National Ambient Air Quality Standards (“NAAQS”), or the New Source Performance Standards (“NSPS”) and other Clean Air Act regulations may decrease the demand for our coal in industrial, metallurgical or electric power generation markets in the future. For more information, please see “Laws and Regulations” under Item 1 above.

Regulation to address climate change (or emissions of greenhouse gases including carbon dioxide and methane) and uncertainty regarding such regulation may affect us directly or indirectly by increasing our operating costs, reducing the value of our coal assets and adversely impacting the market for coal.

The issue of global climate change continues to attract considerable public and scientific attention with widespread concern about the impacts of human activity (especially the emissions of GHGs such as carbon dioxide and methane). Combustion of fossil fuels, such as the coal we produce, results in the emission of carbon dioxide into the atmosphere by coal end-users, such as coal-fired electric power plants. Additionally, our coal mines release methane to the atmosphere during operations in order to promote a safe working environment for our miners underground.

Numerous proposals have been made and are likely to continue to be made at the international, national, regional and state levels of government that are intended to limit emissions of GHGs. The United States, for instance, has been a signatory to the United Nations-sponsored “Paris Agreement,” which requires nations party to the agreement to submit non-binding GHG emissions reduction goals every five years after 2020. On January 20, 2025, President Donald J. Trump issued an Executive Order directing the United States Ambassador to the United Nations to formally withdraw the United States from the Paris Agreement. It is currently unclear what further action the administration will take to address climate change given this new policy direction. Nevertheless, the international community has been called upon to achieve a 43% reduction in GHG emissions by 2030 (compared to 2019 levels) through actions that drive the transition away from fossil fuels in energy systems. In addition, several individual U.S. states have already adopted measures requiring GHG emission reductions within their boundaries. Other states have elected to participate in regional cap-and-trade programs like the RGGI in the northeastern U.S. On November 1, 2023, the Pennsylvania Commonwealth Court issued its decision striking down Pennsylvania's participation in RGGI and determining that RGGI constitutes an illegal tax under the Pennsylvania Constitution. Following this decision, on November 21, 2023, Governor Josh Shapiro announced that the state will appeal the Commonwealth Court's decision. Any significant legislative changes at the international, national, state or local levels designed to reduce GHG emissions could significantly affect our ability to produce and sell our coal and develop our

reserves, could increase the cost of the production and sale of coal and could materially reduce the value of our coal and coal reserves.

These potential legislative changes, as well as concerted conservation and efficiency efforts that result in reduced electricity consumption, and consumer and corporate preferences for non-coal fuel sources, including natural gas and/or alternative energy sources, could cause coal prices and sales of our coal to materially decline and could cause our costs to increase. Further, climate change itself may cause more extreme weather conditions such as more intense hurricanes, thunderstorms, tornadoes and snow or ice storms, as well as rising sea levels and increased volatility in seasonal temperatures. Extreme weather conditions can interfere with our services and increase our costs, and damage resulting from extreme weather may not be fully insured. However, at this time, we are unable to determine the extent to which climate change may lead to increased storm or weather hazards affecting our operations.

Furthermore, adoption of comprehensive legislation or regulation focusing on climate change or GHG emission reductions for the United States or other countries where we sell coal, or the inability of utilities to obtain financing in connection with coal-fired plants, may make it more costly to operate coal-fired electric power generation plants and make coal less attractive for electric utility power plants in the future. Depending on the nature of the regulation or legislation, natural gas and/or alternative energy sources could gain added economic benefits versus coal-fueled power generation, especially if such regulation or legislation makes our coal more expensive as a result of increased compliance, operating and maintenance costs. Apart from actual regulation, uncertainty over the extent of regulation of GHG emissions may inhibit utilities from investing in the building of new coal-fired plants to replace older plants or investing in the upgrading of existing coal-fired plants. Any reduction in the amount of coal consumed by electric power generators as a result of actual or potential regulation of GHG emissions could decrease demand for our fossil fuels, thereby reducing our revenues and materially and adversely affecting our business and results of operations. Our customers may also have to invest in carbon dioxide capture and storage technologies in order to burn coal and comply with future GHG emission standards. Although we cannot predict the ultimate impact of any legislation or regulation, it is likely that any future laws, regulations or other policies aimed at reducing GHG emissions will negatively impact demand for our coal and could also negatively affect the value of our reserves and other assets.

Additionally, if emissions of methane from coal mines are regulated in the future, we would likely be required to install additional pollution control devices, pay fees or taxes for our emissions or incur expenses associated with the purchase of emissions credits, in order to continue operation. Alternatively, we may need to curtail coal production. The magnitude of impact on our operations, capital expenditures, financial condition or cash flows would be dependent on the structure of any proposed regulation and the degree of emission reduction prescribed.

We are subject to litigation seeking to hold energy companies accountable for the effects of climate change and may be subject to additional such litigation in the future.

Increasing attention to climate change risk has also resulted in a recent trend of governmental investigations and private litigation by local and state governmental agencies as well as private plaintiffs in an effort to hold energy companies accountable for the effects of climate change. Other public nuisance lawsuits have been brought in the past against power, coal, oil and gas companies alleging that their operations are contributing to climate change. The plaintiffs in these suits sought various remedies, including punitive and compensatory damages and injunctive relief. While the U.S. Supreme Court held that any federal common law had been displaced by the CAA and thus dismissed the public nuisance claims against the defendants in those cases, tort-type liabilities remain a possibility and a source of concern. For instance, we have been named as a defendant in multiple lawsuits brought by the City of Baltimore, the State of Delaware, the City of Annapolis, and Anne Arundel County, Maryland seeking to hold us and other energy companies liable for the effects of climate change caused by the release of GHGs. The outcome of this litigation is uncertain, and we could incur substantial legal costs associated with defending these and similar lawsuits in the future. Government entities in other states have brought similar claims seeking to hold a wide variety of companies that produce fossil fuels liable for the alleged impacts of the GHG emissions attributable to those fuels or for other grounds related to climate change, such as improper disclosure of climate change risks. Those lawsuits allege damages as a result of climate change and the plaintiffs are seeking unspecified damages and abatement under various tort theories. We have not been made a party to these other suits, but it is possible that we could be included in similar future lawsuits initiated by state and local governments as well as private claimants.

Existing and future government laws, regulations and other legal requirements relating to protection of the environment and other laws that govern our business may increase our costs of doing business and may restrict our coal operations.

We are subject to laws, regulations and other legal requirements enacted or adopted by federal, state and local authorities, as well as foreign authorities, relating to the protection of the environment. These include legal requirements that govern discharges of substances into the air and water, the management and disposal of hazardous substances and wastes, the cleanup of contaminated sites, groundwater quality and availability, threatened and endangered plant and wildlife protection, reclamation and restoration of mining properties after mining is completed, the installation of various safety equipment in our mines, remediation of impacts of surface subsidence from underground mining, and work practices related to employee health and safety. Complying with these requirements, including the terms of our permits, has had, and will continue to have, a significant effect on our costs of operations and competitive position.

In addition, there is the possibility that we could incur substantial costs as a result of violations under environmental laws. Any additional laws, regulations and other legal requirements enacted or adopted by federal, state and local authorities, as well as foreign authorities, or new interpretations of existing legal requirements by regulatory bodies relating to the protection of the environment could further affect our costs of operations and competitive position.

Our business involves many hazards and operating risks, some of which may not be fully covered by insurance. The occurrence of a significant accident or other event that is not fully insured could curtail our operations and have a material adverse effect on our results of operations, financial condition and cash flows.

Our coal mining operations are underground mines. Underground mining and related processing activities present inherent risks of injury or death to persons, damage to property and equipment and other potential legal or other liabilities. In addition, Arch's mining operations include surface mining operations that utilize explosives to remove the earth and rock covering the coal, which creates additional hazards. Our mines are subject to a number of operating risks that could disrupt operations, decrease production and increase the cost of mining at particular mines for varying lengths of time, thereby adversely affecting our operating results. In addition, if an operating risk occurs in our mining operations, we may not be able to produce sufficient amounts of coal to deliver under our multi-year coal contracts. Our inability to satisfy contractual obligations could result in our customers initiating claims against us or canceling their contracts. The operating risks that may have a significant impact on our coal operations include:

- variations in thickness of the layer, or seam, of coal;
- adverse geological conditions, including amounts of rock and other natural materials intruding into the coal seam that could affect the stability of the roof and the side walls of the mine;
- environmental hazards;
- equipment failures or unexpected maintenance problems;
- fires or explosions, including as a result of methane, coal, coal dust or other explosive materials and/or other accidents;
- inclement or hazardous weather conditions and natural disasters or other force majeure events;
- seismic activities, ground failures, rock bursts or structural cave-ins or slides;
- delays in moving our longwall equipment;
- railroad derailments and mandated delays;
- security breaches or terroristic acts; and
- other hazards that could also result in personal injury and loss of life, pollution and suspension of operations.

In this regard, in January 2025, the Company sealed the Leer South mine's active longwall panel in order to extinguish isolated combustion-related activity at the mine. The Company resumed development work with continuous miner units in February 2025, and currently expects to resume longwall mining by mid-year. While the Company believes that this combustion-related activity does not currently pose a threat to the longwall equipment, there can be no guarantee that the equipment will not be damaged or that longwall mining will resume within the expected timeframe. The costs that may be incurred to address the impacts of the incident and to return the mine to active operations are uncertain and could be significant. The extent to which this incident or future incidents at the Leer South mine or other mining properties may adversely impact our results of operations, cash flows and financial condition depends on future developments, which are highly uncertain and unpredictable.

The occurrence of any of these risks at our coal mining operations could adversely affect our ability to conduct our operations or result in substantial loss to us, either of which could materially and adversely affect our business, financial condition, results of operations and cash flows. In addition, the occurrence of any of these events in our coal mining operations which prevents our delivery of coal to a customer and which is not excusable as a force majeure event under our coal sales agreement could result in economic penalties, suspension or cancellation of shipments or ultimately termination

of the coal sales agreement, any of which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Although we maintain insurance for a number of risks and hazards, we may not be insured or fully insured against the losses or liabilities that could arise from a significant accident in our coal operations. We may elect not to obtain insurance for any or all of these risks if we believe that the cost of available insurance is excessive relative to the risks presented. In addition, pollution and environmental risks generally are not fully insurable. Moreover, a significant mine accident could potentially cause a mine shutdown. The occurrence of an event that is not fully covered by insurance could have a material adverse effect on our business, financial condition, results of operations and cash flows.

Failure to obtain or renew surety bonds on acceptable terms could affect our ability to secure reclamation and coal lease obligations and failure to obtain adequate insurance coverages could both have a material adverse effect on our business and results of operations.

Federal and state laws require us to obtain surety bonds or post letters of credit to secure performance or payment of certain long-term obligations, such as mine closure or reclamation costs, federal and state workers' compensation costs, coal leases and other obligations. Over the past few years, the insurance and surety markets have been increasingly challenging, particularly for coal companies. We have experienced rising premiums, reduced coverage and/or fewer providers willing to underwrite policies and surety bonds. Terms have generally become more unfavorable, including increases in the amount of collateral required to secure surety bonds. However, more recently, we have seen insurance rates stabilize and even decrease on certain lines of coverage, as new insurance carriers have entered the market, although there is no assurance that this stabilization or decrease will be sustained or continued. In addition, federal and state regulators are considering making financial assurance requirements more stringent and costly with respect to self-insured coal workers' pneumoconiosis, mine closure and reclamation security amounts. Because we are required by federal and state law to have these bonds in place before mining can commence or continue, our failure to maintain surety bonds, letters of credit or other guarantees or security arrangements would materially and adversely affect our ability to mine or lease coal, and incurring additional rising costs to obtain and maintain such arrangements could have a material adverse effect on our business, financial condition, results of operations and cash flows. Additionally, coal and other mining companies are increasingly struggling to obtain adequate insurance coverage for their business and operations. Our failure to obtain adequate insurance coverages could have a material adverse effect on our business and results of operations. Further cost burdens on our ability to maintain adequate insurance and bond coverage may adversely impact our operations, financial position and liquidity.

Our mines are located in areas containing oil and natural gas shale plays and we may have conflicts with competing holders of mineral rights and rights to use adjacent, overlying or underlying lands.

Substantially all of our coal reserves are in areas containing shale oil and natural gas plays, including the Marcellus Shale, which are currently the subject of substantial exploration for oil and natural gas, particularly by horizontal drilling. If we have received a permit for our mining activities, then while we may have to coordinate our mining with such oil and natural gas drillers and transporters, our mining activities will have priority over any oil and natural gas drillers and transporters with respect to the land covered by our permit. Oil and natural gas drillers and transporters may be subject to laws and regulations that are enforced by regulators that do not have jurisdiction over our activities. Any conflict between our rights and the enforcement actions by any regulator of oil or natural gas-specific rights that conflict with our rights to mine could result in additional costs and possible delays to mining.

For reserves outside of our permits, we engage in discussions with drilling and transport companies on potential areas on which they can drill that may have a minimal effect on our mine plan. If a well is in the path of our mining for coal on land that has not yet been permitted for our mining activities, we may not be able to mine through the well unless we purchase it. Although we have purchased vertical wells in the past, the cost of purchasing a producing horizontal well could be substantially greater than that of a vertical well. Horizontal wells with multiple laterals extending from the well pad may access larger oil and natural gas reserves than a vertical well, which would typically result in a higher cost to acquire. The cost associated with purchasing oil and natural gas wells that are in the path of our coal mining activities could likewise make mining through those wells uneconomical, thereby effectively causing a loss of significant portions of our coal reserves, which could materially and adversely affect our business, financial condition, results of operations and cash flows.

Our operations may also face potential conflicts with holders of other mineral interests such as coalbed methane, natural gas and oil reserves. Some of these minerals are located on, or are adjacent to, some of our coal reserves and active operations, potentially creating conflicting interests between us and the holders of those interests. From time to time, we acquire these minerals ourselves to prevent conflicting interests from arising. If, however, conflicting interests arise and we do not acquire the competing mineral rights, we may be required to negotiate our ability to mine with the holder of the competing mineral rights. If we are unable to reach an agreement with the holders of such rights, or to do so on a cost-

effective basis, we may incur increased costs, and our ability to mine could be impaired, which could materially and adversely affect our business, results of operations, financial condition and cash flows.

In order to maintain, grow and diversify our business, we will be required to make substantial capital expenditures. If we are unable to obtain needed capital or financing on satisfactory terms, our financial leverage could increase.

In order to maintain, grow and diversify our business, we will need to make substantial capital expenditures to fund our share of capital expenditures associated with our mines, acquisitions or other business development initiatives. Maintaining and expanding mines and infrastructure is capital intensive. Specifically, the exploration, permitting and development of coal reserves, mining costs, the maintenance of machinery and equipment and compliance with applicable laws and regulations requires substantial capital expenditures. While a significant amount of the capital expenditures required to build out our mining infrastructure has been spent, we must continue to invest capital to maintain or to increase our production. Decisions to increase our production levels could also affect our capital needs. Our production levels may decrease or may not be able to generate sufficient cash flow, or we may not have access to sufficient financing to continue our production, exploration, permitting and development activities at or above our present levels, and we may be required to defer all or a portion of our capital expenditures. If we do not make sufficient or effective capital expenditures, we will be unable to maintain and grow our business. To fund our capital expenditures, we will be required to use cash from our operations, incur debt or sell additional equity securities. Our ability to obtain bank financing or our ability to access the capital markets for future equity or debt offerings may be limited by our financial condition at the time of any such financing or offering and the covenants in our existing debt agreements, as well as by general economic conditions, contingencies and uncertainties that are beyond our control, such as financial institutions and investors abandoning the thermal coal sector. In addition, incurring additional debt may significantly increase our interest expense and financial leverage, and issuing additional equity securities may result in significant stockholder dilution.

Some investment funds and certain investors may exclude our securities from consideration due to their respective ESG mandates related to investing in fossil fuels, including coal.

Certain organizations that provide corporate governance and other corporate risk information to investors and stockholders have developed scores and ratings to evaluate companies and investment funds based upon ESG or “sustainability” metrics. Currently, there are no universal standards for such scores or ratings, but companies in the energy industry, and in particular those focused on coal, natural gas or petroleum extraction and refining, often perform less well under ESG assessments compared to companies in other industries. The importance of sustainability evaluations is becoming more broadly accepted by investors and stockholders. Indeed, many investment funds focus on positive ESG business practices and sustainability scores when making investments. In addition, investors, particularly institutional investors, use these scores to benchmark companies against their peers and if a company is perceived as lagging, these investors may engage with companies to require improved ESG disclosure or performance. Moreover, certain members of the broader investment community may consider a company's sustainability score as a reputational or other factor in making an investment decision. Consequently, a low ESG or sustainability score could result in our securities, both debt and equity, being excluded from the portfolios of certain investment funds and investors. Additionally, many investment funds and investors are beginning to avoid securities issued by any company in the coal, natural gas or petroleum extraction or refining business, regardless of their particular ESG or sustainability score. There have also been efforts in recent years affecting the investment community, including investment advisers, sovereign wealth funds, public pension funds, universities and other groups, promoting the divestment of fossil fuel equities, encouraging the consideration of ESG practices of companies in a manner that negatively affects coal companies, and also pressuring lenders to limit funding to companies engaged in the extraction of fossil fuel reserves. Relatedly, banks and investment banks based both domestically and internationally have announced that they have adopted climate change guidelines for lenders. The guidelines require the evaluation of carbon risks in the financing of electric power generation plants which may make it more difficult for utilities to obtain financing for coal-fired plants. The impact of such efforts may adversely affect the demand for and price of securities issued by us, and impact our access to the capital and financial markets. As such, our access to capital to fund our continuing operations and growth and diversification opportunities could become more restricted.

While we may publish voluntary disclosures regarding ESG matters or take other actions from time to time, in an effort to improve the ESG profile of our operations or products, we cannot guarantee that these efforts will have the desired effect. For example, our voluntary disclosures may include statements based on assumptions, estimates or third-party information we believe to be reasonable, but which may be uncertain, variable or erroneous. In addition, we may commit to certain ESG initiatives over time, such as investing capital in projects and technologies to reduce our greenhouse gas emissions profile; however, we may not ultimately be able to achieve our goals or reach our commitments, either on the timeframes or costs initially anticipated or at all, due to factors within or outside of our control. Various business units or components of the Company have previously established climate change-related goals and targets. As a result of the Merger and continued efforts to harmonize policies across the new, combined company, the Company has suspended its previous goals and targets and is in the process of reevaluating those policies for the Company as a whole, consistent with investor and

stakeholder expectations. If we do not, or are perceived to not, adapt or comply with investor or stakeholder expectations and standards on ESG matters, we may suffer from reputational damage and an increased risk of litigation or activism, and our business, financial condition and results of operations could be materially and adversely affected.

Finally, a part of our business plan is to regularly and rigorously evaluate opportunities for acquisitions, joint ventures and other business arrangements in the coal industry and related industries that complement our core operations. We may face greater difficulties in finding partners for such acquisitions, joint ventures or other business arrangements if these potential partners are less willing or unwilling to enter into transactions with companies that have a low ESG or sustainability score or companies that engage in fossil fuel activities, which could have a material adverse effect on our ability to expand our business, and therefore, our financial condition, results of operations and cash flows could be negatively impacted.

The Russia-Ukraine war, and sanctions brought by the United States and other countries against Russia, have caused significant market disruptions that may lead to increased volatility in the price of certain commodities, including oil, natural gas, coal and other sources of energy. In addition, global unrest, including the Israel-Hamas conflict, has the potential to cause disruption to the global supply chain that could adversely affect our exports.

February 24, 2022 marked a significant escalation in the Russia-Ukraine war. The extent and duration of the military conflict involving Russia and Ukraine, resulting sanctions and future market or supply disruptions in the region are impossible to predict, but could be significant and may have a severe adverse effect on the region. Globally, various governments have banned imports from Russia including commodities such as oil, natural gas and coal. Separately, in early October 2023, Hamas, a militant group in control of Gaza, and Israel began an armed conflict in Israel, the Gaza Strip, and surrounding areas, which threatens to spread to other Middle Eastern countries including Lebanon, Syria and Iran. The Hamas-Israel military conflict is ongoing, and its length and outcome are highly unpredictable. These events have caused volatility in the aforementioned commodity markets. Although the Company has not experienced any material adverse effect on its results of operations, financial condition or cash flows as a result of these conflicts or the resulting volatility as of the date of this report, such volatility, including market expectations of potential changes in coal prices and inflationary pressures on steel products, may significantly affect prices for our coal or the cost of supplies and equipment, as well as the prices of competing sources of energy for our electric power plant customers, like natural gas.

These conflicts, trade and monetary sanctions, as well as any escalation of either of these conflicts and future developments, could significantly affect worldwide market prices and demand for our coal and cause turmoil in the capital markets and generally in the global financial system. In addition, due to the increasing importance of exports to our business, a disruption in the supply chain or network we rely on to export our coal could adversely affect our business and result in lost sales and increased expenses. Our ability to export coal is dependent on third-party ocean-going container ships, rail, barge, air and trucking systems and, therefore, disruption in these logistics services because of global conflicts, including recent attacks in the Middle East on container ships, could adversely affect our financial performance and financial condition, negatively impacting sales, profitability and cash flows. Either of these risks could have a material adverse effect on our business, financial condition and results of operations, along with our operating costs, making it difficult to execute our planned capital expenditure program. Additionally, the geopolitical and macroeconomic consequences of these conflicts and associated sanctions cannot be predicted, but could severely impact the world economy. If any of these events occur, the resulting political instability and societal disruption could reduce overall demand for coal-fired electricity, steel made through the use of metallurgical coal or our coal generally, causing a reduction in our revenues or an increase in our costs and thereby materially and adversely affecting our results of operations, financial condition and cash flows.

New or existing tariffs and other trade measures could adversely affect our results of operations, financial position and cash flows.

New or existing tariffs and other trade measures could adversely affect our results of operations, financial position and cash flows, either directly or indirectly through various adverse impacts on our significant customers. During the last several years, the U.S. Government imposed tariffs on steel and aluminum and a broad range of other products imported into the U.S. In response to the tariffs imposed by the U.S., the European Union, Canada, Mexico and China have announced tariffs on U.S. goods and services. In February 2025, China announced a 15% tariff on coal and liquified natural gas products. Although some of these tariffs have been rescinded or suspended, these tariffs, along with any additional tariffs or trade restrictions that may be implemented by the U.S. or retaliatory trade measures or tariffs implemented by other countries, could result in reduced economic activity, increased costs in operating our business, reduced demand and changes in purchasing behaviors for thermal and metallurgical coal, limits on trade with the United States or other potentially adverse economic outcomes. Additionally, we sell coal into the export thermal market and the export metallurgical market. Accordingly, our international sales may also be impacted by the tariffs and other restrictions on trade between the U.S. and other countries. While tariffs and other retaliatory trade measures imposed by other countries on U.S. goods have not yet had a significant impact on our business or results of operations, we cannot predict further developments, and such existing or future tariffs could have a material adverse effect on our results of operations, financial position and cash flows.

We may be unsuccessful in finding suitable joint venture partners or acquisition targets or in integrating the operations of any future acquisitions, including acquisitions involving new lines of business, with our existing operations, and in realizing all or any part of the anticipated benefits of any such acquisitions.

From time to time, we may evaluate and acquire assets and businesses that we believe complement our existing assets and business. However, our ability to grow our business through acquisitions or the entry into joint ventures may be limited by both our ability to identify appropriate acquisition or partner candidates and our financial resources, including our available cash and borrowing capacity. Additionally, the assets and businesses we acquire or in which we take an ownership stake through a joint venture may be dissimilar from our existing lines of business. Acquisitions and joint venture operations may require substantial capital or the incurrence of substantial indebtedness, and potentially may not be on favorable terms. Our capitalization and results of operations may change significantly as a result of future acquisitions and joint ventures. Acquisitions, joint ventures and business expansions involve numerous risks, including the following:

- difficulties in the integration of the assets and operations of the acquired businesses;
- inefficiencies and difficulties that arise because of unfamiliarity with new assets and the businesses associated with them and new geographic areas;
- the possibility that we have insufficient expertise to engage in such activities profitably or without incurring inappropriate amounts of risk;
- potential lack of control over a joint venture's business decisions and operations; and
- the diversion of management's attention from other operating issues.

Further, unexpected costs and challenges may arise whenever businesses with different operations or management are combined, and we may experience unanticipated delays in realizing the benefits of an acquisition. Entry into certain lines of business may subject us to new laws and regulations with which we are not familiar, and may lead to increased litigation and regulatory risk. Also, following an acquisition, we may discover previously unknown liabilities associated with the acquired business or assets for which we have no recourse under applicable indemnification provisions. If a new business generates insufficient revenue or if we are unable to efficiently manage our expanded operations, our results of operations may be adversely affected.

Additionally, our participation in joint venture arrangements necessarily involves risk. Whether or not we hold majority interests or maintain operational control in our joint ventures, our partners may, among other things, (1) have economic or business interests or goals that are inconsistent with, or opposed to, ours; (2) seek to block actions that we believe are in our or the joint venture's best interests; or (3) be unable or unwilling to fulfill their obligations under the joint venture or other agreements, such as contributing capital, each of which may adversely impact our results of operations, financial condition, cash flows or impair our ability to recover our investment in the joint venture. Where our joint ventures are jointly controlled or not managed by us, we may provide expertise and advice but have limited control over compliance with our operational and other standards. Failure by non-controlled joint venture partners to adhere to operational standards that are equivalent to ours could unfavorably affect safety results, operating costs and productivity and accordingly, adversely impact our results of operations, financial condition and cash flows.

We must obtain, maintain and renew governmental permits and approvals which, if we cannot obtain in a timely manner, would reduce our production, cash flow and results of operations.

Our coal production is dependent on our ability to obtain various federal and state permits and approvals to mine our coal reserves. The permitting rules, and the interpretations of these rules, are complex, change frequently and are often subject to discretionary interpretations by regulators. For example, under Section 404 of the Clean Water Act, the Army Corps of Engineers ("Corps") issues permits for the discharge of dredged or fill material into regulated waters and wetlands, and under Section 401 of the Clean Water Act, affected states must certify that proposed activity under Section 404 will comply with water quality standards or other applicable requirements. Corps permits and state certifications are required for construction of slurry ponds, refuse areas, impoundments, and for various other mining activities. The Section 404/401 permitting process has become subject to increasingly stringent regulatory requirements and challenges by environmental organizations. Where authorization by a federal agency is required, the federal agency may be required under the National Environmental Policy Act to consider the GHG emissions associated with the proposed project, both directly and indirectly, and may incorporate such considerations in its approval or denial. In addition, the public, including non-governmental organizations and individuals, has certain statutory rights to comment upon and otherwise impact the permitting process, including through court intervention. It is possible that all permits required to commence new operations, or to expand or continue operations at existing facilities, may not be issued or renewed in a timely manner, or may not be approved at all. Furthermore, permits could be issued with operating requirements or special conditions that increase the cost of operations. Any of these circumstances could have significant negative effects and could materially and adversely affect our results of operations and cash flows.

Our mines are subject to stringent federal and state safety regulations that increase our cost of doing business at active operations and may place restrictions on our methods of operation. In addition, government inspectors, under certain circumstances, have the ability to order our operations to be shut down based on safety considerations.

The Federal Coal Mine Safety and Health Act and Mine Improvement and New Emergency Response Act impose stringent health and safety standards on mining operations. Regulations that have been adopted are comprehensive and affect numerous aspects of mining operations, including training of mine personnel, mining procedures, the equipment used in mine emergency procedures and other matters. States in which we operate have programs for mine safety and health regulation and enforcement. The various requirements mandated by law or regulation can place restrictions on our methods of operations, and potentially lead to penalties for the violation of such requirements, creating a significant effect on operating costs and productivity. In addition, government inspectors, under certain circumstances, have the ability to order our operation to be shut down based on safety considerations. If an incident were to occur at one of our coal mines, it could be shut down for an extended period of time and our reputation with our customers could be materially damaged.

Our operations may impact the environment or cause exposure to hazardous substances, and our properties may have environmental contamination, which could result in liabilities to us. In addition, government inspectors, under certain circumstances, have the ability to order our operations to be shut down based on environmental considerations.

Our operations currently use hazardous materials and generate limited quantities of hazardous wastes from time to time. 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.” 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 for the entire share. In addition, government inspectors, under certain circumstances, may have the ability to order our operations to be shut down based on a perceived or actual violation of regulations concerning hazardous substances and other matters related to environmental protection. 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 adversely affect us.

Our operations include coal refuse disposal areas, slurry impoundments and other water retaining or dam structures, with multiple facilities classified as “high” or “significant” hazards, depending on the extent of damage or loss of life that could occur in the event of a failure. A failure of these structures would result in liabilities that could have a material impact on our business.

We maintain coal refuse disposal areas (“CRDAs”), slurry impoundments and other water retaining or dam structures that are active or in various stages of reclamation at the Pennsylvania Mining Complex, the Itmann Mining Complex and at certain legacy properties. Such areas and impoundments are subject to extensive regulation and are designed, constructed, operated and maintained according to stringent environmental, structural and safety standards. In addition to routine inspections conducted by multiple regulatory authorities, these facilities are also inspected by qualified third-party inspectors and are separately certified by an independent professional engineer where required by law or regulation. Structural failure of a CRDA, slurry impoundment or other dam structure classified as a high or significant hazard could result in extensive damage to the environment and natural resources, such as bodies of water, as well as liability for related personal injuries, property damages, injuries to wildlife or loss of life. 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 these structures were to fail, we could be subject to claims for the resulting environmental contamination and associated liability, claims for personal injury or loss of life, and claims for physical property damage, as well as fines and penalties. These events could materially and adversely impact our business, financial condition, results of operations and cash flows.

We depend on the services of key executives and any inability to attract and retain key management personnel could have a material adverse effect on our business.

Our future success depends upon the continued services of our executive officers, including our Executive Chair of the Board of Directors, Chief Executive Officer and Chief Financial Officer and President, who have critical experience and relationships in the coal industry that we rely on to implement our business plan and growth strategy. Our ability to retain senior management has in the past been, and may in the future be, impacted by volatility in commodity prices and uneven business performance, which have negatively impacted our stock price, and therefore, our ability to use equity compensation as a retention tool. Additionally, the recent efforts of certain members of the investment community, including investment advisors, sovereign wealth funds, public pension funds, universities and other groups, to promote divestment of fossil fuel equities, to encourage the consideration of ESG practices of companies in a manner that negatively affects coal companies and to pressure lenders to limit funding to companies engaged in the extraction of fossil

fuel reserves may also negatively impact our ability to attract and retain key management personnel. Accordingly, we have entered into, and may need to enter into additional, retention or other arrangements that could be costly to maintain. While we have change-in-control agreements in place with our senior executives, there can be no assurance we will continue to retain their services and we may become subject to significant severance payments if our relationship with these executives is terminated under certain circumstances. Further, turnover, planned or otherwise, in these or other key leadership positions may materially adversely affect our ability to manage our business efficiently and effectively, and such turnover can be disruptive and distracting to management, may lead to additional departures of existing personnel and could have a material adverse effect on our operations and future profitability. Our ability to retain our key management personnel or to identify and attract additional management personnel or suitable replacements should any members of the management team leave or be terminated is dependent on a number of factors, including the competitive nature of the employment market and our industry. Any failure to retain key management personnel or to attract additional or suitable replacement personnel could cause uncertainty among investors, employees, customers and others concerning our future direction and performance and could have a material adverse effect on our business, financial condition and results of operations.

We have asset retirement obligations and obligations for long-term employee benefits. If the assumptions underlying our accruals are inaccurate, we could be required to expend greater amounts than anticipated.

The Surface Mining Control and Reclamation Act and various state laws establish operational, reclamation and closure standards for all our coal mining operations and require us, under certain circumstances, to plug natural gas wells. We accrue for the costs of current mine disturbance, gas well plugging and of final mine closure, including the cost of treating mine water discharge where necessary. Estimates of our total asset retirement obligations, which are based upon permit requirements, engineering studies and our engineering expertise related to these requirements, were approximately \$248 million at December 31, 2024. The amounts recorded are dependent upon a number of variables, including the estimated future expenditures, estimated mine lives, assumptions involving profit margins, inflation rates and the assumed credit-adjusted risk-free interest rates. If these accruals are insufficient, our future operating results could be adversely affected.

We also provide various long-term employee benefits to inactive and retired employees, and we accrue amounts for these obligations. At December 31, 2024, the current and non-current portions of these obligations included:

- postretirement medical and life insurance (\$194 million);
- coal workers' pneumoconiosis benefits (\$162 million);
- pension benefits (\$22 million);
- workers' compensation (\$46 million); and
- long-term disability (\$6 million).

Our management and engineers periodically review these estimates. However, if our assumptions are inaccurate, major operational changes are implemented or if government regulations change significantly, we could be required to expend greater amounts than anticipated. Salary retirement benefits are funded in accordance with Employer Retirement Income Security Act of 1974 ("ERISA") regulations. The other obligations are unfunded. In addition, the federal government and several states in which we operate consider changes in workers' compensation and black lung laws from time to time. Such changes, if enacted, could increase our benefit expense and our collateral requirements. Additionally, former miners and their family members asserting claims for pneumoconiosis benefits have generally been more successful asserting such claims in recent years as a result of the presumption within the PPACA of 2010 that a coal miner with 15 or more years of underground coal mining experience (or the equivalent) who develops a respiratory condition and meets the requirements for total disability under the Federal Act is presumed to be disabled due to coal dust exposure, thereby shifting the burden of proof from the employee to the employer/insurer to establish that this disability is not due to coal dust. The increasing success rate of such claims based upon the PPACA changed presumption and, as a result, the increasing expense incurred by us to insure against such claims could increase our expenses for long-term employee benefit obligations.

We face uncertainties in estimating our economically recoverable coal reserves, and inaccuracies in our estimates could result in lower-than-expected revenues, higher-than-expected costs and decreased profitability.

Coal reserves are economically recoverable when the price at which they are expected to be sold exceeds their expected cost of production and selling. Forecasts of our future performance are based on, among other things, estimates of our recoverable coal reserves. We base our coal reserve information on geologic data, coal ownership information and current and proposed mine plans. These estimates are periodically updated to reflect past coal production, new drilling information and other geologic or mining data. There are numerous uncertainties inherent in estimating quantities and qualities of economically recoverable coal reserves, including many factors beyond our control. As a result, estimates of economically recoverable coal reserves are by their nature uncertain. Information about our reserves consists of estimates based on engineering, economic and geological data assembled and analyzed by our staff and external consultants. Some of the factors and assumptions which impact economically recoverable coal reserve estimates include:

- geologic and mining conditions;
- historical production from the area compared with production from other producing areas;
- the assumed effects of regulations and taxes by governmental agencies;
- our ability to obtain, maintain and renew all required permits;
- future improvements in mining technology;
- assumptions governing future prices; and
- future operating costs, including the cost of materials and capital expenditures.

In addition, we hold substantial coal reserves in areas containing Marcellus Shale and other shales. These areas are currently the subject of substantial exploration for oil and natural gas, particularly by horizontal drilling. If a natural gas well is in the path of our mining for coal, we may not be able to mine through the well unless we purchase it. Although we have purchased vertical wells in the past, the cost of purchasing a producing horizontal well could be substantially greater. Horizontal wells with multiple laterals extending from the well pad may access larger natural gas reserves than a vertical well which could result in higher costs. In future years, the cost associated with purchasing natural gas wells which are in the path of our coal mining may make mining through those wells uneconomical, thereby effectively causing a loss of significant portions of our coal reserves.

Each of the factors which impacts reserve estimation may vary considerably from the assumptions used in estimating the reserves. For these reasons, estimates of coal reserves may vary substantially. Actual production, revenues and expenditures with respect to our coal reserves will likely vary from estimates, and these variances may be material. As a result, our estimates may not accurately reflect our actual coal reserves.

Defects may exist in our chain of title for our undeveloped coal reserves where we have not done a thorough chain of title examination of our undeveloped coal reserves. We may incur additional costs and delays to mine coal because we have to acquire additional property rights to perfect our title to coal rights. If we fail to acquire additional property rights to perfect our title to coal rights, we may have to reduce our estimated reserves.

Title to most of our owned or leased properties and mineral rights is not usually verified until we make a commitment to mine a property, which may not occur until after we have obtained necessary permits and completed exploration of the property. In some cases, we rely on title information or representations and warranties provided by our lessors or grantors. Our right to mine certain of our reserves has in the past been, and may again in the future be, adversely affected if defects in title, boundaries or other rights necessary for mining exist or if a lease expires. Any challenge to our title or leasehold interests could delay the mining of the property and could ultimately result in the loss of some or all of our interest in the property. From time to time, we also may be in default with respect to leases for properties on which we have mining operations. In such events, we may have to close down or significantly alter the sequence of such mining operations which may adversely affect our future coal production and future revenues. If we mine on property that we do not own or lease, we could incur liability for such mining and be subject to regulatory sanction and penalties.

In order to obtain, maintain or renew leases or mining contracts to conduct our mining operations on property where these defects exist, we may in the future have to incur unanticipated costs. In addition, we may not be able to successfully negotiate new leases or mining contracts for properties containing additional reserves, or maintain our leasehold interests in properties where we have not commenced mining operations during the term of the lease. As a result, our results of operations, business and financial condition may be materially adversely affected.

As a result of the Murray Energy bankruptcy, the Company could be required to pay for certain liabilities previously acquired by Murray in a 2013 transaction between Murray and our former parent.

In 2013, Murray Energy and its subsidiaries (“Murray”) entered into a stock purchase agreement (the “Murray sale agreement”) with our former parent pursuant to which Murray acquired the stock of Consolidation Coal Company and certain subsidiaries and certain other assets and liabilities. At the time of sale, the liabilities of the sold companies included certain retiree medical liabilities under the Coal Industry Retiree Health Benefit Act of 1992 (“Coal Act”) and certain federal black lung liabilities under the Black Lung Benefits Act (“BLBA”). Based upon information available to the Company, we estimate that the annual servicing costs of these liabilities are approximately \$10 million to \$20 million per year for the next ten years. The annual servicing cost would decline each year since the beneficiaries of the Coal Act consist principally of miners who retired prior to 1994.

Murray filed for Chapter 11 bankruptcy in October 2019. As part of the bankruptcy proceedings, Murray unilaterally entered into a settlement with the United Mine Workers of America 1992 Benefit Plan (the “1992 Benefit Plan”) to transfer retirees in the Murray Energy Section 9711 Plan to the 1992 Benefit Plan. This was approved by the bankruptcy court on April 30, 2020. On May 2, 2020, the 1992 Benefit Plan filed an action in the United States District Court for the District of Columbia asking the court to make a determination whether the Company's former parent or the Company has any continuing retiree medical liabilities under the Coal Act (the “1992 Plan Lawsuit”). The Murray sale agreement includes

indemnification by Murray with respect to the Coal Act and BLBA liabilities. In addition, the Company had agreed to indemnify its former parent relative to certain pre-separation liabilities. As of September 16, 2020, the Company entered into a settlement agreement with Murray and withdrew its claims in bankruptcy. On September 11, 2020, the Defendants in the 1992 Plan Lawsuit filed a Motion to Dismiss Plaintiffs' Second Amended Complaint which was denied by the Court on March 29, 2022. The Company will continue to vigorously defend any claims that attempt to transfer any of such liabilities directly or indirectly to the Company, including raising all applicable defenses against the 1992 Benefit Plan's suit; however, the outcome of these proceedings is uncertain.

We are subject to certain ongoing indemnification obligations related to our separation from our former parent that, if realized, could materially impact our financial condition, results of operations and cash flows.

Although we separated from our former parent more than seven years ago, we have certain ongoing indemnification obligations related to our separation that could materially impact our financial condition, results of operations and cash flows. Specifically, under the 2017 Separation and Distribution Agreement between the Company and its former parent, we could be required to indemnify our former parent for liabilities relating to our business, whether occurring prior to or after the separation and certain other amounts, including defense costs, settlement amounts and judgments. Likewise, our former parent may fail to indemnify us against certain liabilities related to its business as required by the separation and distribution agreement, or any such indemnity provided by our former parent may be insufficient to make us whole against any third party claims brought against us in connection with such liabilities.

The provisions of our debt agreements and the risks associated with our debt could adversely affect our business, financial condition, liquidity and results of operations.

As of December 31, 2024, our total long-term indebtedness was approximately \$209 million, consisting of:

- \$103 million under our Maryland Economic Development Corporation Port Facilities Refunding Revenue Bonds ("MEDCO") 5.75% revenue bonds due September 2025;
- \$75 million under our Pennsylvania Economic Development Financing Authority ("PEDFA") 9.00% Solid Waste Disposal Revenue Bonds due April 2028;
- \$24 million associated with finance leases due through 2029; and
- \$7 million of miscellaneous debt.

At December 31, 2024, no borrowings were outstanding under our revolving credit facility or our \$100 million accounts receivable securitization facility. On January 14, 2025, and in connection with the Merger, we entered into an amendment to our revolving credit facility to increase the available revolving commitments from \$355 million to \$600 million. The degree to which we are leveraged could have important consequences, including, but not limited to:

- increasing our vulnerability to general adverse economic and industry conditions;
- requiring us to dedicate a substantial portion of our cash flow from operations to the payment of interest and principal due under our outstanding debt, which will limit our ability to obtain additional financing to fund future working capital, capital expenditures, share buy-back programs, acquisitions, pay dividends, development of our coal reserves or other general corporate requirements;
- limiting our flexibility in planning for, or reacting to, changes in our business and in the coal industry;
- placing us at a competitive disadvantage compared to our competitors with lower leverage and better access to capital resources; and
- limiting our ability to implement our business strategy.

Our senior secured credit agreement and the indenture governing our PEDFA bonds limit the incurrence of additional indebtedness unless specified tests or exceptions are met. In addition, our senior secured credit agreement and the indenture governing our PEDFA bonds subject us to financial and/or other restrictive covenants. Under our senior secured credit agreement, we must comply with certain financial covenants on a quarterly basis, including a maximum first lien gross leverage ratio, a maximum total net leverage ratio and a minimum interest coverage ratio, as defined therein. Our senior secured credit agreement and the indenture governing our PEDFA bonds impose a number of restrictions upon us, such as restrictions on us granting liens on our assets, making investments, paying dividends, stock repurchases, selling assets and engaging in acquisitions. Failure by us to comply with these covenants could result in an event of default that, if not cured or waived, could have a material adverse effect on us.

If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be forced to sell assets, seek additional capital or seek to restructure or refinance our indebtedness. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations. In the absence of such operating results and resources, we could face substantial liquidity problems and might be required to sell material assets or operations to

attempt to meet our debt service and other obligations. Our senior secured credit agreement and the indenture governing our PEDFA bonds restrict our ability to sell assets and use the proceeds from the sales. We may not be able to consummate those sales or to obtain the proceeds which we could realize from them and these proceeds may not be adequate to meet any debt service obligations then due.

Terrorist attacks or cyber incidents could result in information theft, data corruption, operational disruption and/or financial loss.

We have become increasingly dependent upon digital technologies, including information systems, infrastructure and cloud applications and services, to operate our businesses, process and record financial and operating data, communicate with our employees and business partners, and estimate quantities of coal reserves, as well as other activities related to our businesses. Strategic targets, such as energy-related assets, may be at greater risk of future terrorist or cyber attacks than other targets in the United States. Deliberate attacks on our assets, or security breaches in our systems, infrastructure or cloud-based applications, could lead to corruption or loss of our proprietary data and potentially sensitive data, delays in production or delivery, difficulty in completing and settling transactions, challenges in maintaining our books and records, environmental damage, communication interruptions, other operational disruptions and third-party liability. Similarly, our vendors or service providers could be the subject of such attacks or breaches that result in the risks of corruption or loss of our proprietary and sensitive data and/or the other disruptions as described above. In addition to the existing risks, the adoption of new technologies may also increase our exposure to data breaches or our ability to detect and remediate effects of a breach. Consequently, it is possible that any of these occurrences, or a combination of them, could have a material adverse effect on our business, financial condition, results of operations and cash flows. Further, as cyber incidents continue to evolve, we may be required to expend additional resources to continue to modify or enhance our protective measures or to investigate and remediate any vulnerability to cyber incidents.

Certain provisions in our multi-year fixed-price coal sales contracts may provide limited protection during adverse economic conditions, may result in economic penalties to us or permit the customer to terminate the contract.

Price adjustment, "price reopener" and other similar provisions in our multi-year coal sales contracts may reduce the protection from coal price volatility traditionally provided by coal supply contracts. Price reopener provisions are present in several of our multi-year coal sales contracts. These price reopener provisions may automatically set a new price based on the prevailing market price or, in some instances, require the parties to agree on a new price, sometimes within a specified range of prices. In a limited number of agreements, failure of the parties to agree on a price under a price reopener provision can lead to termination of the contract. Any adjustment or renegotiations leading to a significantly lower contract price could adversely affect our profitability.

Most of our coal sales agreements contain provisions requiring us to deliver coal within certain ranges for specific coal quality characteristics such as heat content, sulfur, ash, moisture, volatile matter, grindability, ash fusion temperature, size consistency and certain metallurgical coal properties. Failure to meet these conditions could result in penalties or rejection of the coal at the election of the customer. Our coal sales contracts also typically contain force majeure provisions allowing for the suspension of performance by either party for the duration of specified events. Force majeure events include, but are not limited to, floods, earthquakes, storms, fire, faults in the coal seam or other geologic conditions, other natural catastrophes, wars, terrorist acts, civil disturbances or disobedience, strikes, railroad transportation delays caused by a force majeure event and actions or restraints by court order and governmental authority or arbitration award. Depending on the language of the contract, some contracts may terminate upon continuance of an event of force majeure that extends for a period greater than three to twelve months and some contracts may obligate us to perform notwithstanding what would typically be a force majeure event.

Our ability to operate our business effectively could be impaired if we fail to attract and retain qualified personnel, or if a meaningful segment of our employees becomes unionized.

Our ability to operate our business and implement our strategies depends, in part, on our continued ability to attract and retain the qualified personnel necessary to conduct our business. Efficient coal mining using modern techniques and equipment requires skilled employees in multiple disciplines such as electricians, equipment operators, mechanics, engineers and welders, among others. Although we have not historically encountered shortages for these types of skilled employees, competition in the future may increase for such positions, especially as it relates to needs of other industries with respect to these positions, including oil and gas. If we experience shortages of skilled employees in the future, our labor and overall productivity or costs could be materially adversely affected. In the future, we may utilize a greater number of external contractors for portions of our operations. The costs of these contractors have historically been higher than that of our employees. If our labor and contractor prices increase, or if we experience materially increased health and benefit costs with respect to our employees, our results of operations could be materially adversely affected.

Except for 41 of our employees at the CONSOL Marine Terminal who unionized in 2018, none of our employees are currently represented by a labor union or covered under a collective bargaining agreement, although many employers in our industry have employees who belong to a union. It is possible that employees at our other locations may join or seek recognition to form a labor union, or we may be required to become a labor agreement signatory. If some or all of our current non-union operations were to become unionized, we could incur an increased risk of work stoppages, reduced productivity and higher labor costs. Also, if we fail to maintain good relations with our employees at the CONSOL Marine Terminal, we could potentially experience labor disputes, work stoppages or other disruptions in the business of the CONSOL Marine Terminal, which could negatively impact the profitability of the CONSOL Marine Terminal, and accordingly, have a material adverse effect on our business, results of operations and financial condition.

If we do not maintain effective internal controls over financial reporting, we could fail to accurately report our financial results.

During the course of the preparation of our financial statements, we evaluate our internal controls to identify and correct deficiencies in our internal controls over financial reporting. If we fail to maintain an effective system of disclosure controls or internal control over financial reporting, including satisfaction of the requirements of the Sarbanes-Oxley Act, we may not be able to accurately or timely report on our financial results or adequately identify and reduce fraud. As a result, the financial condition of our business could be adversely affected, current and potential future stockholders could lose confidence in us and/or our reported financial results, which may cause a negative effect on the trading price of our common stock, and we could be exposed to litigation or regulatory proceedings, which may be costly or divert management attention.

Risks Related to Our Common Stock and the Securities Market

Our stock price may fluctuate significantly.

The market price of our common stock may fluctuate significantly due to a number of factors, some of which may be beyond our control, including:

- our quarterly or annual earnings, or those of other companies in our industry;
- actual or anticipated fluctuations in our operating results;
- changes in earnings estimates by securities analysts or our ability to meet those estimates or our earnings guidance;
- the operating and stock price performance of other comparable companies;
- overall market fluctuations and domestic and worldwide economic conditions;
- volatility resulting from geopolitical events, inflation, changes in interest rates and other macroeconomic events; and
- other factors described in these “Risk Factors” and elsewhere in this Annual Report on Form 10-K.

Stock markets in general have experienced volatility that has often been unrelated to the operating performance of a particular company. These broad market fluctuations may adversely affect the trading price of our common stock. As a result of these factors, holders of our common stock or other securities may not be able to resell their shares at or above the market price at which they purchased their shares or may not be able to resell them at all. In addition, price volatility with our common stock may be greater if trading volume is low.

Furthermore, shares of our common stock are freely tradeable without restriction or further registration under the U.S. Securities Act of 1933, as amended (the “Securities Act”), unless the shares are owned by one of our “affiliates,” as that term is defined in Rule 405 under the Securities Act. As a result, a sale of a substantial amount of our common stock, or the perception that such a sale may take place, could cause our stock price to decline.

If securities analysts do not publish research or reports about our Company, or issue unfavorable commentary about us or downgrade our shares, the price of our shares could decline.

The trading market for our shares depends in part on the research and reports that third-party securities analysts publish about our Company and our industry. We may be unable or slow to attract research coverage and if one or more analysts cease coverage of our Company, we could lose visibility in the market. The impact of the revised EU Markets in Financial Instruments Directive (“MiFID”), which requires that investment managers and investment advisors located in the EU “unbundle” research costs from commissions, may result in fewer securities analysts covering our Company. This is because investment firms subject to MiFID are no longer permitted to pay for research using client commissions or “soft dollars” and instead must pay such costs directly or through a research payment account funded by clients and governed by a budget that is agreed by the client, thereby raising their costs of providing research coverage. In addition, one or more analysts providing research coverage of our Company could use estimation or valuation methods that we do not agree with,

downgrade our shares or issue other negative commentary about our company or our industry. As a result of one or more of these factors, the trading price of our shares could decline.

We cannot guarantee the timing, amount or payment of dividends on our common stock in the future or that we will continue to repurchase shares of our common stock.

While we pivoted toward repurchases of shares of our common stock and away from the payment of quarterly dividends in 2023, we suspended our share repurchases in 2024 and our Board of Directors subsequently authorized dividends in lieu of repurchases per the provisions of the Merger Agreement. The payment and amount of any future dividend following the closing of the Merger is at the discretion of our Board of Directors and will depend upon many factors, including our financial condition and prospects, our capital requirements and access to capital markets, covenants associated with certain of our debt obligations, legal requirements and other factors that our Board of Directors may deem relevant, and there can be no assurance that we will return to declaring and paying dividends in the future in the amounts we have previously declared. On February 18, 2025, the Company's Board of Directors approved a new capital return framework that involves a mix of dividends and share repurchases. The repurchase program permits the repurchase, from time to time, of the Company's outstanding shares of common stock in an aggregate amount of up to \$1 billion, subject to certain limitations in the Company's debt agreements. The repurchase program does not obligate us to repurchase any specific number of shares of common stock and may be suspended from time to time or terminated at any time prior to its expiration. There can be no assurance that we will repurchase shares under the repurchase program in the future in any particular amounts or at all. A reduction in, or elimination of, share repurchases could have a negative effect on the trading price of our common stock.

Your percentage of ownership in the Company may be diluted in the future.

Your percentage of ownership in us may be diluted because of equity issuances for future acquisitions, capital market transactions or otherwise, including, without limitation, equity awards that we may be granting to our directors, officers and employees. We cannot predict the effect, if any, that market sales of these securities or the availability of the securities will have on the prevailing market price of our common stock. Substantial sales of shares of our common stock or other securities into the public market, or the perception that those sales could occur, may cause the market price of our common stock to decline. Future issuances of our common stock, or other securities convertible into our common stock, may result in significant dilution to the proportionate ownership and voting power of our existing stockholders and could have a dilutive effect on our earnings per share, which could adversely affect the market price of our common stock.

It is anticipated that the compensation committee of the Board of Directors of the Company will continue to grant additional equity awards to Company employees and directors, from time to time, under the Company's compensation and employee benefit plans. These additional awards will have a dilutive effect on the Company's earnings per share, which could adversely affect the market price of the Company's common stock.

In addition, our amended and restated certificate of incorporation authorizes us to issue, without the approval of our stockholders, one or more classes or series of preferred stock, often called "blank check preferred stock," having such designation, powers, preferences and relative, participating, optional and other special rights, including preferences over our common stock with respect to dividends and distributions, as our Board of Directors generally may determine. The terms of one or more classes or series of preferred stock could dilute the voting power or reduce the value of our common stock. For example, we could grant the holders of preferred stock the right to elect some number of our directors in all events or on the happening of specified events or to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we could assign to holders of preferred stock could affect the residual value of our common stock.

Certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws, and of Delaware law, may prevent or delay an acquisition of us, which could decrease the trading price of our common stock.

The Company's amended and restated certificate of incorporation and amended and restated bylaws and Delaware law contain provisions that are intended to deter coercive takeover practices and inadequate takeover bids by making such practices or bids unacceptably expensive to the bidder and to encourage prospective acquirers to negotiate with the Company's Board of Directors rather than to attempt a hostile takeover. These provisions include, among others:

- the inability of our stockholders to act by written consent unless such written consent is unanimous;
- the inability of our stockholders to call special meetings;
- rules regarding how stockholders may present proposals or nominate directors for election at stockholder meetings;
- the right of our Board of Directors to issue preferred stock without stockholder approval; and
- the ability of our directors, and not stockholders, to fill vacancies (including those resulting from an enlargement of our Board of Directors) on our Board of Directors.

In addition, we are subject to Section 203 of the Delaware General Corporation Law (“DGCL”). Section 203 provides that, subject to limited exceptions, persons that (without prior board approval) acquire, or are affiliated with a person that acquires, more than 15% of the outstanding voting stock of a Delaware corporation shall not engage in any business combination with that corporation, including by merger, consolidation or acquisitions of additional shares, for a three-year period following the date on which that person or its affiliate becomes the holder of more than 15% of the corporation’s outstanding voting stock.

We believe these provisions will protect our stockholders from coercive or otherwise unfair takeover tactics by requiring potential acquirers to negotiate with our Board of Directors and by providing our Board of Directors with more time to assess any acquisition proposal. These provisions are not intended to make us immune from takeovers. However, these provisions could have the effect of delaying, deferring or preventing a change in control or the removal of the existing Board of Directors and/or management, of deterring potential acquirers from making an offer to our stockholders and of limiting any opportunity to realize premiums over prevailing market prices for our common stock in connection therewith. This could be the case notwithstanding that a majority of our stockholders might benefit from such a change in control or offer.

Our certificate of incorporation designates the State Courts of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders’ ability to obtain an alternative judicial forum for disputes with us or our directors, officers, employees or agents.

Our certificate of incorporation provides that unless we consent in writing to the selection of an alternative forum, a state court sitting in the State of Delaware (or, if no state court located within the State of Delaware has jurisdiction, the federal court for the District of Delaware) will, to the fullest extent permitted by applicable law, be the sole and exclusive forum for:

- any derivative action or proceeding brought on our behalf;
- any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, employees or agents to us or our stockholders;
- any action asserting a claim arising pursuant to any provision of the DGCL, our amended and restated certificate of incorporation or our bylaws;
- any action asserting a claim that is governed by the internal affairs doctrine, in each such case subject to such Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein; or
- any action asserting an internal corporate claim as defined in Section 115 of the DGCL.

Any person or entity purchasing or otherwise holding any interest in shares of our common stock will be deemed to have notice of, and consented to, the provisions of our certificate of incorporation described in the preceding sentence. This choice of forum provision may limit a stockholder’s ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, employees or agents, which may discourage such lawsuits against us and such persons. Alternatively, if a court were to find these provisions of our amended and restated certificate of incorporation inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, we may incur additional costs associated with resolving such matters in other jurisdictions.

Risks Related to Our Merger with Arch

Uncertainties associated with the Merger may cause a loss of management personnel and other key employees, which could adversely affect the future business and operations of the Company.

The Company depends on the experience and industry knowledge of its officers and other key employees to execute its business plans. The success of the Company will depend in part on its ability to retain key management personnel and other key employees. Employees of the Company may experience uncertainty about their roles within the Company following the Merger or other concerns regarding the operations of the Company following the Merger, any of which may have an adverse effect on the ability of the Company to retain key management and other key personnel. If the Company is unable to retain personnel, including key management, who are critical to the future operations of the Company, the Company could face disruptions in its operations, loss of existing customers, loss of key information, expertise or know-how and unanticipated additional recruitment and training costs. In addition, the loss of key personnel could diminish the anticipated benefits of the Merger. No assurance can be given that the Company will be able to retain key management personnel and other key employees to the same extent that the Company has previously been able to retain its employees.

The business relationships of the Company may be subject to disruption due to uncertainty associated with the Merger, which could have a material effect on the business, financial condition, cash flows and results of operations of the Company.

Parties with which the Company does business may experience uncertainty associated with the Merger, including with respect to current or future business relationships with the Company. The Company's business relationships may be subject to disruption as customers, distributors, suppliers, vendors, landlords, joint venture participants and other third parties with whom they do business may attempt to delay or defer entering into new business relationships, negotiate changes in existing business relationships or consider entering into business relationships with parties other than the Company. These disruptions could have a material and adverse effect on the business, financial condition, cash flows and results of operations of the Company, as well as a material and adverse effect on the Company's ability to realize the expected cost savings and other benefits of the Merger.

The Company has incurred and expects to continue to incur significant costs in connection with the Merger and integration of Arch with the Company, which may be in excess of those anticipated by the Company.

The Company has incurred a number of non-recurring costs associated with negotiating and completing the Merger and expects to continue to incur a number of non-recurring costs associated with combining Arch's operations with the Company's operations. These expenses have been, and will continue to be, substantial. The substantial majority of non-recurring expenses will consist of transaction costs related to the Merger and include, among others, employee retention costs, fees paid to financial, legal and accounting advisors, severance and benefit costs, filing fees and debt restructuring costs.

The Company will also incur transaction costs related to formulating and implementing integration plans, including facilities and systems consolidation costs and employment-related costs. Expectations that the Company will offset integration-related costs over time by the elimination of duplicative costs, as well as the realization of other efficiencies related to the integration of the businesses, may not be achieved in the near term, or at all. The costs described above, as well as other unanticipated costs and expenses, could adversely affect the financial condition, cash flows and operating results of the Company.

The failure to integrate the businesses and operations of the Company and Arch successfully in the expected time frame may adversely affect the Company's future results.

Prior to the completion of the Merger, Arch operated independently from the Company. Following the completion of the Merger, their respective businesses may not be integrated successfully. It is possible that the integration process could result in the loss of key employees; the loss of customers, service providers, vendors or other business counterparties; the disruption of ongoing businesses; inconsistencies in standards, controls, procedures and policies; potential unknown liabilities and unforeseen expenses, delays or regulatory conditions associated with and following completion of the Merger; or higher-than-expected integration costs and an overall post-completion integration process that takes longer than originally anticipated.

In addition, at times the attention of certain members of management and resources may be focused on completion of the Merger and the integration of the businesses of the two companies and diverted from day-to-day business operations or other opportunities that may be beneficial, which may disrupt each company's ongoing operations and the operations of the Company.

Furthermore, the Board of Directors and executive leadership of the Company consists of former directors from each of the Company and Arch and former executive officers from each of the Company and Arch. Combining the boards of directors and management teams of each company into a single board and a single management team could require the reconciliation of differing priorities and philosophies.

The Company may fail to realize all of the anticipated benefits of the Merger.

The success of the Merger will depend, in part, on the Company's ability to realize the anticipated benefits and cost savings from combining the Company's and Arch's businesses and operational synergies. The anticipated benefits and cost savings of the Merger may not be realized fully or at all, may take longer to realize than expected, or could have other adverse effects that the Company does not currently foresee, in which case, among other things, the Merger may not be accretive to free cash flow and may not generate significant discretionary cash flow to return to stockholders via share buybacks or other means. Some of the assumptions that the Company has made, such as the achievement of the anticipated benefits related to the geographic, commodity and asset diversification and the expected size, scale, inventory and financial strength of the Company, may not be realized. The integration process may result in the loss of key employees, the disruption of

ongoing businesses or inconsistencies in standards, controls, procedures and policies. In addition, there could be potential unknown liabilities and unforeseen expenses associated with the Merger that could adversely impact the Company.

The Company's ability to utilize Arch's historic net operating loss carryforwards and certain other tax attributes may be limited.

As of December 31, 2024, Arch had U.S. federal net operating loss carryforwards ("NOLs") of approximately \$364.1 million, \$55.3 million of which is subject to expiration, if not utilized, starting in 2037. The remaining carryforwards do not expire. However, they can only be used to offset 80% of U.S. federal taxable income. The Company's ability to utilize these NOLs and other tax attributes to reduce future taxable income depends on many factors, including its future income, which cannot be assured. Section 382 of the Code ("Section 382") and Section 383 of the Code generally impose an annual limitation on the amount of NOLs and certain other tax attributes that may be used to offset taxable income when a corporation has undergone an "ownership change" (as determined under Section 382). The Merger was deemed an ownership change and, as a result, utilization of Arch's NOLs is subject to an annual limitation under Section 382, determined by multiplying (1) the fair market value of its stock at the time of the ownership change by (2) the long-term tax-exempt rate published by the IRS for the month in which the ownership change occurs, subject to certain adjustments. Any unused annual limitation may be carried over to later years.

ITEM 1B. Unresolved Staff Comments

None.

ITEM 1C. Cybersecurity

Risk Management and Strategy

The Company has a cybersecurity risk program that is based on industry standards and best practices managed by a dedicated staff and specialists that support this program. We have implemented a set of system, network and application-level controls to protect our corporate data and systems. These controls are monitored for cybersecurity risk events and incidents on a continuous basis by a dedicated staff of cybersecurity professionals and various third-party providers. These controls are updated as necessary to protect the Company. In addition, the Company also takes a proactive approach by monitoring cyber threat intelligence to stay informed regarding emerging risks. The cybersecurity risk program also utilizes third-party assessors, consultants and auditors to perform various services, such as tabletop exercises and network penetration tests. The Company provides awareness training to its employees to help identify, avoid and mitigate cybersecurity threats. Employees with network access participate quarterly in required training, including spear phishing and other awareness training. The program also has a policy in place to address vendor and third-party risk. Cybersecurity risk is also evaluated during the acquisition process for new products and services.

The Company accounts for cybersecurity risk as a part of the Company's overall business strategy and planning. The Board's Audit Committee, which oversees all matters related to risk management and, in particular, the security of and risks related to the Company's information technology systems, receives regular reports on the Company's cybersecurity risk management efforts from various senior officers of the Company. The Company also has a corporate cybersecurity risk Steering Committee, which is a cross-functional group comprised of both senior management and other key business unit leaders that provides input to senior management on the Company's cybersecurity risk program.

The Company has not experienced any material operational or financial impact as the result of a cybersecurity risk or incident and, at this time, the risks from cybersecurity threats are not reasonably likely to materially affect the Company's business strategy, results of operations or financial condition. However, it is prepared to mitigate and respond to such an event should it occur. The Company has prepared a comprehensive Cybersecurity Incident Response Plan, as well as an Information Technology Disaster Recovery Plan. These plans are reviewed, updated and tested on a regular basis. Specifically, the Company conducts cybersecurity tabletop exercises that include participation by Audit Committee members, senior management and third-party cybersecurity consultants.

The Company faces a range of cybersecurity threats including threats common to many industries, such as ransomware and denial of service, as well as more advanced threats specific to critical infrastructure industries such as mining. The Company's customers, equipment suppliers, transportation facility providers and joint venture partners face similar cybersecurity threats, and a cybersecurity incident affecting the Company or any of these entities could materially affect our operations, performance and results of operations. The Company continues to invest in the cybersecurity and resiliency of its networks and to enhance its internal controls and processes, which are designed to help protect our systems and infrastructure, and the information they contain. For more information regarding the risks we face from cybersecurity, please see the section titled "Risk Factors - Terrorist attacks or cyber incidents could result in information theft, data corruption, operational disruption and/or financial loss."

Governance

The Company's Board of Directors has assigned oversight of cybersecurity risk to the Audit Committee, as outlined in the Committee's charter. Updates on the cybersecurity risk program are provided at each Audit Committee meeting. Additionally, the Company's senior management engages with the Audit Committee on a regular basis to provide updates on our cybersecurity risk program.

The Company has a Cybersecurity Manager who reports directly to the Director of Information Technology. The Company's Cybersecurity Manager has 25 years of industry experience and holds many relevant industry certifications. The Cybersecurity Manager has direct oversight of the cybersecurity risk program. Cybersecurity risk briefings are provided to the Audit Committee by the Director of Information Technology at all regular meetings. Additionally, the Director of Information Technology and Cybersecurity Manager communicate directly with the Audit Committee chair as needed to ensure adequate oversight of the program.

ITEM 2. Properties

See "Principal Properties" in Item 1 of this Annual Report on Form 10-K for a description of our mining properties and our terminals through which we provide coal and export terminal services, incorporated herein by this reference. See the map under "Principal Properties" in Item 1 of this Annual Report on Form 10-K for the location of the Company's material properties. Our principal executive offices are located at 275 Technology Drive, Suite 101, Canonsburg, Pennsylvania 15317-9565.

ITEM 3. Legal Proceedings

Our operations are subject to a variety of risks and disputes normally incidental to our business. As a result, we may, at any given time, be a defendant in various legal proceedings and litigation arising in the ordinary course of business. However, we are not currently subject to any material litigation, other than those described in Note 23, "Commitments and Contingent Liabilities," in the Notes to the Audited Consolidated Financial Statements in Item 8 of this Form 10-K, which descriptions are incorporated herein by this reference.

ITEM 4. Mine Safety Disclosures

Information concerning mine safety violations or other regulatory matters required by Section 1503(a) of the Dodd-Frank Wall Street Reform and Consumer Protection Act and Item 104 of Regulation S-K is included in Exhibit 95 to this annual report.

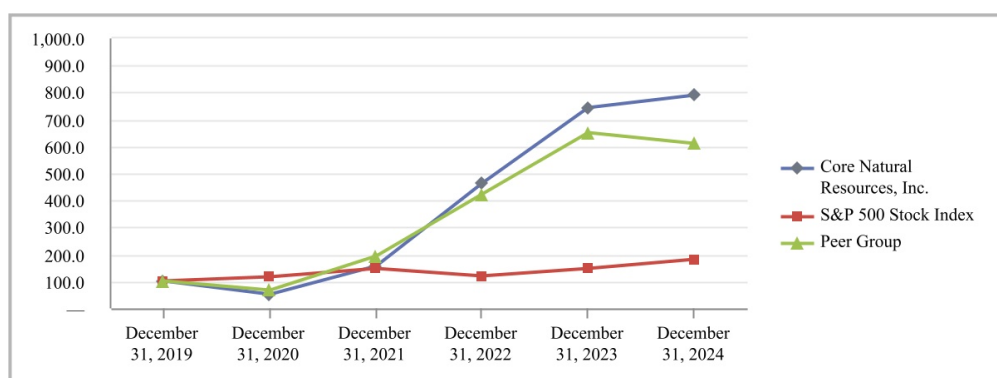
PART II

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

Shares of the Company's common stock are listed on the New York Stock Exchange and trade under the symbol "CNR". Trading of the Company's common stock began as "when-issued" trading on November 3, 2017 and began as "regular-way" trading on November 29, 2017.

As of January 31, 2025, there were 69 holders of record of our common stock. A substantially greater number of holders of our common stock are "street name" or beneficial holders, whose shares of record are held by banks, brokers and other financial institutions.

The following performance graph compares the Company's cumulative total shareholder return to that of the Company's peer group and the Standard & Poor's 500 Stock Index. The peer group, for the purposes of the information presented below, is comprised of Alliance Resource Partners LP, Arch Resources, Inc., Alpha Metallurgical Resources, Inc. (formerly known as Contura Energy, Inc.), Hallador Energy Company, Peabody Energy Corporation, Ramaco Resources, Inc. and Warrior Met Coal, Inc.



The graph above assumes that the value of an initial investment in the Company's common stock and each index was \$100 at December 31, 2019. The graph also assumes that all dividends were reinvested and that the investments were held through December 31, 2024.

	2019	2020	2021	2022	2023	2024
Core Natural Resources, Inc.	100.0	49.7	156.5	461.0	740.9	789.8
S&P 500 Stock Index	100.0	116.3	147.5	118.8	147.6	182.0
Peer Group	100.0	65.7	194.4	420.0	649.3	609.9

The above information is being furnished pursuant to Regulation S-K, Item 201 (e) (Performance Graph).

Repurchases of Equity Securities

There were no repurchases of the Company's equity securities during the three months ended December 31, 2024. In December 2017, the Company's Board of Directors approved a program to repurchase, from time to time, the Company's outstanding shares of common stock or its 11.00% Senior Secured Second Lien Notes due 2025. This program terminated on December 31, 2024. However, on February 18, 2025, the Company's Board of Directors approved a new capital return framework that involves a mix of dividends and share repurchases. The repurchase program permits the repurchase, from time to time, of the Company's outstanding shares of common stock in an aggregate amount of up to \$1 billion, subject to certain limitations in the Company's debt agreements.

Limitation on Payment of Dividends

The Revolving Credit Facility includes certain covenants limiting the Company's ability to declare and pay dividends.

Equity Compensation Plan Information

See Part III, Item 12. “Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters” for information relating to our equity compensation plans.

ITEM 6. [Reserved.]

ITEM 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

The Company's discussion and analysis includes a comparison of the year ended December 31, 2024 to the year ended December 31, 2023. A similar discussion and analysis that compares the year ended December 31, 2023 to the fiscal year ended December 31, 2022 may be found in Item 7, “Management's Discussion and Analysis of Financial Condition and Results of Operations,” of our Form 10-K for the year ended December 31, 2023, which is incorporated herein by reference.

All amounts discussed are in millions of U.S. dollars, unless otherwise indicated. All tons discussed are on a clean coal equivalent basis.

Recent Developments

Merger

On January 14, 2025, Core Natural Resources, Inc. (formerly known as CONSOL Energy Inc.), a Delaware corporation, completed its previously announced merger of equals transaction with Arch. Pursuant to the terms of the Merger Agreement, Merger Sub merged with and into Arch, with Arch continuing as the surviving corporation and as a wholly-owned subsidiary of the Company. In connection with the closing of the Merger, we and Arch now operate as a single combined company. See Note 25 - Subsequent Events in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

The results of operations presented in this Annual Report on Form 10-K do not include the historical financial results of Arch since the Merger occurred subsequent to the end of the reporting period. However, the Merger is expected to have a significant impact on our future results of operations. As such, we expect that our financial information for future reporting periods, which will reflect the results of operations of Arch, will not be directly comparable to our financial information for periods prior to the Merger, including the information presented in this Annual Report on Form 10-K.

In addition, the Company has historically consisted of two reportable segments, the PAMC segment and the CONSOL Marine Terminal segment, and Arch has historically consisted of two reportable segments, the Metallurgical segment and the Thermal segment. Following the Merger, we expect to reassess our reporting segments in the first quarter of 2025 based on how the operations of the combined company will be managed.

Combustion-Related Activity at Leer South Mine

On January 13, 2025, isolated combustion-related activity was reported at the Leer South mine, located in Barbour County, West Virginia. The Company temporarily sealed the Leer South mine's active longwall panel in order to extinguish such activity. The Company resumed development work with continuous miners in February 2025, and, based on collaborative, ongoing discussions with regulatory authorities, currently expects to resume longwall mining in mid-2025. The re-entry process will be multi-phased, beginning with the construction of ventilation controls followed by the resumption of continuous miner development.

How We Evaluate Our Operations

Our management team uses a variety of financial and operating metrics to analyze our performance. These metrics are significant factors in assessing our operating results and profitability. The metrics include: (i) adjusted EBITDA, a non-GAAP financial measure; (ii) coal production, sales volumes and average coal revenue per ton sold; (iii) cost of coal sold, a non-GAAP financial measure; (iv) cash cost of coal sold, a non-GAAP financial measure; (v) average cash cost of coal sold per ton, an operating ratio derived from non-GAAP financial measures; and (vi) average cash margin per ton sold, an operating ratio derived from non-GAAP financial measures.

We believe that adjusted EBITDA provides a helpful measure of comparing our operating performance with the performance of other companies that have different financing, capital structures and tax rates than ours. We believe cost of coal sold, cash cost of coal sold, average cash cost of coal sold per ton, and average cash margin per ton sold normalize the volatility contained within comparable GAAP measures by adjusting for certain non-operating or non-cash transactions. Each of these non-GAAP metrics are used as supplemental financial measures by management and by external users of our financial statements, such as investors, industry analysts, lenders and ratings agencies, to assess:

- our operating performance compared to the operating performance of other companies in the coal industry, without regard to financing methods, historical cost basis, tax rates or capital structure;
- the ability of our assets to generate sufficient cash flow;
- our ability to incur and service debt and fund capital expenditures;
- the viability of acquisitions and other capital expenditure projects and the returns on investment of various investment opportunities; and
- the attractiveness of capital projects and acquisitions and the overall rates of return on alternative investment opportunities.

These non-GAAP financial measures should not be considered an alternative to operating and other costs, net income, or any other measure of financial performance presented in accordance with GAAP. These measures exclude some, but not all, items that affect measures presented in accordance with GAAP, and these measures and the way we calculate them may vary from those of other companies. As a result, the items presented below may not be comparable to similarly titled measures of other companies.

Reconciliation of Non-GAAP Financial Measures

We evaluate our cost of coal sold and cash cost of coal sold on an aggregate basis by segment, and our average cash cost of coal sold per ton on a per-ton basis. Cost of coal sold includes items such as direct operating costs, royalty and production taxes, direct administration costs, and depreciation, depletion and amortization costs on production assets. Cost of coal sold excludes any indirect costs and other costs not directly attributable to the production of coal. The cash cost of coal sold includes cost of coal sold less depreciation, depletion and amortization costs on production assets. We define average cash cost of coal sold per ton as cash cost of coal sold divided by tons sold. The GAAP measure most directly comparable to cost of coal sold, cash cost of coal sold and average cash cost of coal sold per ton is operating and other costs.

The following table presents a reconciliation for the PAMC segment of cash cost of coal sold, cost of coal sold and average cash cost of coal sold per ton to operating and other costs, the most directly comparable GAAP financial measure, on a historical basis, for each of the periods indicated (in thousands, except per ton information).

	Years Ended December 31,	
	2024	2023
Operating and Other Costs	\$ 1,270,696	\$ 1,120,065
Less: Other Costs (Non-Production and non-PAMC)	(297,557)	(180,173)
Cash Cost of Coal Sold	\$ 973,139	\$ 939,892
Add: Depreciation, Depletion and Amortization (PAMC Production)	172,998	190,962
Cost of Coal Sold	\$ 1,146,137	\$ 1,130,854
Total Tons Sold (in millions)	25.7	26.0
Average Cost of Coal Sold per Ton	\$ 44.63	\$ 43.42
Less: Depreciation, Depletion and Amortization Costs per Ton Sold	6.74	7.32
Average Cash Cost of Coal Sold per Ton	\$ 37.89	\$ 36.10

We evaluate our average cash margin per ton sold on a per-ton basis. We define average cash margin per ton sold as average coal revenue per ton sold, net of average cash cost of coal sold per ton. The GAAP measure most directly comparable to average cash margin per ton sold is total coal revenue.

The following table presents a reconciliation for the PAMC segment of average cash margin per ton sold to total coal revenue, the most directly comparable GAAP financial measure, on a historical basis, for each of the periods indicated (in thousands, except per ton information).

	Years Ended December 31,	
	2024	2023
Total Coal Revenue (PAMC Segment)	\$ 1,683,200	\$ 2,024,610
Operating and Other Costs	1,270,696	1,120,065
Less: Other Costs (Non-Production and non-PAMC)	(297,557)	(180,173)
Cash Cost of Coal Sold	\$ 973,139	\$ 939,892
Total Tons Sold (in millions)	25.7	26.0
Average Coal Revenue per Ton Sold	\$ 65.54	\$ 77.74
Less: Average Cash Cost of Coal Sold per Ton	37.89	36.10
Average Cash Margin per Ton Sold	\$ 27.65	\$ 41.64

We define adjusted EBITDA as (i) net income (loss) plus income taxes, interest expense and depreciation, depletion and amortization, as adjusted for (ii) certain non-cash items, such as stock-based compensation and loss on debt extinguishment and (iii) certain one-time transactions, such as merger-related expenses and certain litigation expenses for specific proceedings that arise outside of the ordinary course of our business. The GAAP measure most directly comparable to adjusted EBITDA is net income (loss).

The following tables present a reconciliation of adjusted EBITDA to net income (loss), the most directly comparable GAAP financial measure, on a historical basis, for each of the periods indicated (in thousands).

	For the Year Ended December 31, 2024			
	PAMC	CONSOL Marine Terminal	Other	Consolidated
Net Income (Loss)	\$ 463,283	\$ 45,568	\$ (222,446)	\$ 286,405
Add: Income Tax Expense	—	—	44,242	44,242
Add: Interest Expense	—	6,071	16,121	22,192
Less: Interest Income	(6,334)	—	(12,889)	(19,223)
Earnings (Loss) Before Interest & Taxes (EBIT)	456,949	51,639	(174,972)	333,616
Add: Depreciation, Depletion & Amortization	182,876	5,237	35,413	223,526
Earnings (Loss) Before Interest, Taxes and DD&A (EBITDA)	\$ 639,825	\$ 56,876	\$ (139,559)	\$ 557,142
Adjustments:				
Add: Stock-Based Compensation	\$ 9,187	\$ 521	\$ 1,642	\$ 11,350
Add: Merger-Related Expenses	—	—	19,280	19,280
Add: 1974 UMWA Pension Plan Litigation	—	—	67,933	67,933
Less: Non-Qualified Pension Plan Curtailment Gain	—	—	(217)	(217)
Total Pre-tax Adjustments	9,187	521	88,638	98,346
Adjusted EBITDA	\$ 649,012	\$ 57,397	\$ (50,921)	\$ 655,488

	For the Year Ended December 31, 2023			
	PAMC	CONSOL Marine Terminal	Other	Consolidated
Net Income (Loss)	\$ 810,234	\$ 69,253	\$ (223,595)	\$ 655,892
Add: Income Tax Expense	—	—	121,980	121,980
Add: Interest Expense	—	6,097	23,228	29,325
Less: Interest Income	(2,344)	—	(11,253)	(13,597)
Earnings (Loss) Before Interest & Taxes (EBIT)	807,890	75,350	(89,640)	793,600
Add: Depreciation, Depletion & Amortization	202,833	4,671	33,813	241,317
Earnings (Loss) Before Interest, Taxes and DD&A (EBITDA)	\$ 1,010,723	\$ 80,021	\$ (55,827)	\$ 1,034,917
Adjustments:				
Add: Stock-Based Compensation	\$ 8,438	\$ 301	\$ 1,307	\$ 10,046
Add: Loss on Debt Extinguishment	—	—	2,725	2,725
Total Pre-tax Adjustments	8,438	301	4,032	12,771
Adjusted EBITDA	<u>\$ 1,019,161</u>	<u>\$ 80,322</u>	<u>\$ (51,795)</u>	<u>\$ 1,047,688</u>

Results of Operations: Year Ended December 31, 2024 Compared with the Year Ended December 31, 2023
Revenue and Other Income

	For the Year Ended December 31,		
	2024	2023	Variance
Coal Revenue - PAMC	\$ 1,683	\$ 2,025	\$ (342)
Coal Revenue - Itmann Mining Complex	104	82	22
Terminal Revenue	88	106	(18)
Freight Revenue	274	294	(20)
Miscellaneous Other Income	80	53	27
Gain on Sale of Assets	7	9	(2)
Total Revenue and Other Income	\$ 2,236	\$ 2,569	\$ (333)

Revenues from Contracts with Customers

On a consolidated basis, coal revenue for the year ended December 31, 2024 was \$1,787 million, which consisted of \$1,683 million from the Pennsylvania Mining Complex and \$104 million from the Itmann Mining Complex. The \$1,787 million of coal revenue was sold into the following markets: \$861 million into power generation, \$564 million into industrial, and \$362 million into metallurgical. The Company had consolidated coal revenue of \$2,107 million for the year ended December 31, 2023, which consisted of \$2,025 million from the Pennsylvania Mining Complex and \$82 million from the Itmann Mining Complex. The \$2,107 million of coal revenue was sold into the following markets: \$1,019 million into power generation, \$773 million into industrial, and \$315 million into metallurgical.

The Company's Terminal revenue consists of fees charged for coal loaded at the CONSOL Marine Terminal, which is located in the Port of Baltimore, Maryland, and provides access to international coal markets. Terminal revenues are generated from providing transloading services from rail to vessel or barge, temporary storage or stockpile facilities, as well as blending, weighing, and sampling. Terminal revenues were \$88 million for the year ended December 31, 2024, compared to \$106 million for the year ended December 31, 2023. See "Operational Performance - CONSOL Marine Terminal Analysis" for further information about segment results.

The Company recognizes freight revenue as the amount billed to customers for transportation costs incurred. This revenue is based on the weight of coal shipped, negotiated freight rates and method of transportation, primarily rail, used by the customers to which the Company contractually provides transportation services to move its coal from the mine to the ultimate sales point. Freight revenue is completely offset by freight expense. Freight revenue and freight expense were both \$274 million for the year ended December 31, 2024, compared to \$294 million for the year ended December 31, 2023.

Miscellaneous Other Income

Miscellaneous other income was \$80 million for the year ended December 31, 2024, compared to \$53 million for the year ended December 31, 2023. The change is due to the following items:

	For the Year Ended December 31,		
	2024	2023	Variance
Interest Income	\$ 19	\$ 14	\$ 5
Royalty Income - Non-Operated Coal	18	9	9
Contract Assessments	15	16	(1)
Carbon Products and Materials	9	—	9
Other Income	19	14	5
Miscellaneous Other Income	\$ 80	\$ 53	\$ 27

Interest income increased primarily due to the Company's investment in marketable debt securities, comprised of highly liquid U.S. Treasury securities.

Royalty income increased as a result of additional leased coal volumes related to overriding royalty agreements or coal reserve leases between the Company and third-party operators.

Contract assessment income includes penalties and fees levied against customers that did not meet the purchase obligations under their contracts with the Company. This amount also includes partial contract buyouts that involved negotiations with customers to reduce coal quantities that they otherwise were obligated to purchase under contracts in exchange for payment of certain fees to the Company, and did not impact forward contract terms.

Carbon products and materials revenue increased due to additional investments in December 2023 in coal-to-product businesses led by CONSOL Innovations LLC, our wholly-owned subsidiary.

The increase in other income was primarily related to advancements from the Company's insurance carriers related to a claim filed as a result of the Francis Scott Key Bridge collapse on March 26, 2024, which restricted vessel access to, and export capability from, the CONSOL Marine Terminal.

Operating and Other Costs

On a consolidated basis, operating and other costs were \$1,271 million for the year ended December 31, 2024, compared to \$1,120 million for the year ended December 31, 2023. Operating and other costs increased in the period-to-period comparison due to the following items:

	For the Year Ended December 31,		
	2024	2023	Variance
Operating Costs - PAMC	\$ 973	\$ 940	\$ 33
Operating Costs - Itmann Mining Complex	132	99	33
Operating Costs - Terminal	27	27	—
1974 UMWA Pension Plan Litigation	68	—	68
Employee-Related Legacy Liability Expense	22	12	10
Coal Reserve Holding Costs	8	16	(8)
Closed and Idle Mines	5	5	—
Other	36	21	15
Operating and Other Costs	\$ 1,271	\$ 1,120	\$ 151

Operating costs for the Pennsylvania Mining Complex include items such as direct operating costs, royalties and production taxes and direct administration costs. In the period-to-period comparison, operating costs - PAMC increased \$33 million, primarily due to additional costs associated with ongoing inflationary pressures. See “*Operational Performance - PAMC Analysis*” for further information on segment operating costs.

Operating costs for the Itmann Mining Complex primarily consist of costs related to produced tons sold and costs incurred to purchase third-party metallurgical coal to blend with Itmann coal. Operating costs - Itmann Mining Complex include items such as direct operating costs, royalties and production taxes and direct administration costs. The \$33 million increase in operating costs - Itmann Mining Complex was primarily due to increases in the volume of coal produced and the volume of purchased coal as the operations continued to ramp up toward full run-rate production.

Operating costs - Terminal primarily consist of costs related to throughput tons at the CONSOL Marine Terminal, and these costs remained consistent in the period-to-period comparison. See “*Operational Performance - CONSOL Marine Terminal Analysis*” for further information on segment operating costs.

The 1974 UMWA Pension Plan litigation expense of \$68 million represents the net present value of payments to be made over a five-year period to the United Mine Workers of America 1974 Pension Plan in accordance with a partial motion for summary judgment filed by the Superior Court of the State of Delaware on November 8, 2024. See Note 23 - Commitments and Contingent Liabilities in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Employee-related legacy liability expense increased \$10 million in the period-to-period comparison primarily due to the impact of changes in actuarial assumptions made at the beginning of each year. See Note 15 - Pension and Other Postretirement Benefit Plans and Note 16 - Coal Workers' Pneumoconiosis and Workers' Compensation in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information.

Coal reserve holding costs decreased \$8 million in the period-to-period comparison, primarily as a result of the termination/expiration of various coal leases during the year ended December 31, 2023.

Other costs consist of items that are not related to the Company's mining or terminal operations. Other costs increased \$15 million in the year-over-year comparison. The increase was primarily attributable to \$7 million of additional costs related to businesses led by CONSOL Innovations LLC, particularly the production of composite tools used in the aerospace industry, as well as other expenses incurred in both periods across various categories, none of which were individually material.

Depreciation, Depletion and Amortization

On a consolidated basis, depreciation, depletion and amortization costs were \$224 million for the year ended December 31, 2024, compared to \$241 million for the year ended December 31, 2023. The \$17 million decrease was primarily due to additional assets becoming fully-depreciated and a decrease in the Company's asset retirement obligation expense in the period-to-period comparison.

General and Administrative Costs

On a consolidated basis, general and administrative costs were \$115 million for the year ended December 31, 2024, compared to \$103 million for the year ended December 31, 2023. The \$12 million increase in the period-to-period comparison was primarily due to transaction costs related to the Merger, partially offset by decreased incentive-based compensation expense incurred in the year ended December 31, 2024 compared to the year ended December 31, 2023.

Interest Expense

On a consolidated basis, interest expense, net of amounts capitalized, was \$22 million for the year ended December 31, 2024, compared to \$29 million for the year ended December 31, 2023. The \$7 million decrease in the period-to-period comparison was primarily due to less debt outstanding, as the Company fully retired its Term Loan B and Second Lien Notes in 2023.

Operational Performance: Year Ended December 31, 2024 Compared with the Year Ended December 31, 2023

During the year ended December 31, 2024, the Company consisted of two reportable segments, the PAMC and the CONSOL Marine Terminal. The PAMC includes the Bailey Mine, the Enlow Fork Mine, the Harvey Mine and a centralized preparation plant. The PAMC segment's principal activities include the mining, preparation and marketing of bituminous coal, sold primarily to industrial end-users, metallurgical end-users and power generators. The segment also includes general and administrative activities and interest expense, as well as various other activities assigned to the PAMC segment, but not included in the cost components on a per unit basis. The CONSOL Marine Terminal segment provides coal export terminal services through the Port of Baltimore. The segment also includes general and administrative activities and interest expense, as well as various other activities assigned to the CONSOL Marine Terminal segment.

The Company evaluates the performance of its segments utilizing Adjusted EBITDA and various productivity metrics. Adjusted EBITDA measures the operating performance of the Company's segments and is used to allocate resources to the Company's segments. The following table presents results by reportable segment for each of the periods indicated.

	Year Ended December 31,		
	2024	2023	Variance
PAMC			
Total Tons Produced (in millions)	25.7	26.1	(0.4)
Total Tons Sold (in millions)	25.7	26.0	(0.3)
Average Coal Revenue per Ton Sold	\$ 65.54	\$ 77.74	\$ (12.20)
Average Cash Cost of Coal Sold per Ton ⁽¹⁾	\$ 37.89	\$ 36.10	\$ 1.79
Average Cash Margin per Ton Sold ⁽¹⁾	\$ 27.65	\$ 41.64	\$ (13.99)
Adjusted EBITDA (in thousands) ⁽¹⁾	\$ 649,012	\$ 1,019,161	\$ (370,149)
CONSOL Marine Terminal			
Throughput Tons (in millions)	17.0	19.0	(2.0)
Adjusted EBITDA (in thousands) ⁽¹⁾	\$ 57,397	\$ 80,322	\$ (22,925)

(1) Adjusted EBITDA is a non-GAAP financial measure, and average cash cost of coal sold per ton and average cash margin per ton sold are operating ratios derived from non-GAAP financial measures. See “*How We Evaluate Our Operations - Reconciliation of Non-GAAP Financial Measures*” above for an explanation and reconciliation of these amounts to the nearest GAAP measures.

PAMC ANALYSIS:

Coal Production

The table below presents total tons produced (in thousands) from the Pennsylvania Mining Complex for the periods indicated:

Mine	Year Ended December 31,		
	2024	2023	Variance
Bailey	10,762	11,164	(402)
Enlow Fork	9,181	8,661	520
Harvey	5,744	6,237	(493)
Total	25,687	26,062	(375)

Coal production was 25.7 million tons for the year ended December 31, 2024, compared to 26.1 million tons for the year ended December 31, 2023. The PAMC's coal production decreased in the period-to-period comparison. Vessel access to, and export capability from, the CONSOL Marine Terminal was restricted on March 26, 2024 after the Francis Scott Key Bridge collapsed. As a result, the operating schedules at the PAMC mines were reduced during the first half of the second quarter of 2024. However, after the Baltimore channel was fully re-opened in early June 2024, operating schedules were increased in the back half of 2024 to meet market demand.

Coal Operations

Adjusted EBITDA for the year ended December 31, 2024 was \$649 million, compared to \$1,019 million for the year ended December 31, 2023. The decrease was primarily attributable to a \$12.20 decrease in average coal revenue per ton sold, as well as a 0.3 million decrease in tons sold and a \$1.79 increase in the average cash cost of coal sold per ton. The decrease in average coal revenue per ton sold was primarily due to weaker API2 and natural gas prices year-over-year, which put downward pressure on the Company's realizations in 2024, and higher incremental transportation costs. These transportation costs were incurred due to the Company's utilization of an alternative port because access to the CONSOL Marine Terminal was suspended as a result of the Francis Scott Key Bridge collapse. In addition, after a modest rebound in the fourth quarter of 2023, demand for the Company's product in the power generation markets was muted during the first quarter of 2024 due to mild winter weather which caused weaker commodity prices both domestically and globally. These downward pressures were partially offset by stronger PJM West day ahead power prices in the second and third quarters of 2024, specifically due to the warmer-than-normal temperatures in the PJM region. Despite the reduced export capability as a result of the Francis Scott Key Bridge collapse that occurred on March 26, 2024, the PAMC placed 15.5 million tons of coal, or 60% of its total tons sold, into the export market in the year ended December 31, 2024. Comparatively, in the year ended December 31, 2023, the PAMC placed 15.7 million tons of coal, or 60% of its total tons sold, into the export market.

Cash cost of coal sold was \$973 million for the year ended December 31, 2024, compared to \$940 million for the year ended December 31, 2023. The increase in the cash cost of coal sold and average cash cost of coal sold per ton was primarily due to ongoing inflationary pressures on supplies, maintenance costs and contractor labor costs compared to the prior-year period, as well as lower sales tons to absorb fixed costs on a per ton basis in the period-to-period comparison.

CONSOL MARINE TERMINAL ANALYSIS:

Vessel access to, and export capability from, the CONSOL Marine Terminal was restricted on March 26, 2024 after the Francis Scott Key Bridge collapsed. Management worked diligently to minimize the disruption to our business and address direct and indirect impacts to the Company and its operations, including moving coal through an alternative port on the East Coast of the United States, accelerating domestic shipments and managing ongoing expenditures. On May 20, 2024, a limited access channel in the Chesapeake Bay was opened to commercial vessel traffic and coal shipments to international markets resumed from the CONSOL Marine Terminal. The permanent 700-foot wide, 50-foot deep channel was restored and opened on June 10, 2024.

As a result of the bridge collapse, throughput volumes and revenue from those volumes were halted until May 20, 2024. The Company used this downtime to perform several maintenance projects originally scheduled to occur during the summer shutdown period. Accordingly, adjusted EBITDA for the year ended December 31, 2024 was \$57 million, compared to \$80 million for the year ended December 31, 2023. Throughput volumes at the CONSOL Marine Terminal were 17.0 million tons for the year ended December 31, 2024, compared to 19.0 million tons for the year ended December 31, 2023. CONSOL Marine Terminal revenue was \$88 million for the year ended December 31, 2024, compared to \$106 million for the year ended December 31, 2023.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, estimates and assumptions that affect reported amounts of assets and liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities in the Consolidated Financial Statements and at the date of the financial statements. See Note 1 - Significant Accounting Policies in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K for further discussion. The Company bases its estimates on historical experience and on various other assumptions that it believes are reasonable under the circumstances, the results of which form the basis for making the judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. The Company evaluates its estimates on an on-going basis. Actual results could differ from those estimates upon subsequent resolution of identified matters. Management believes that the estimates utilized are reasonable. The following critical accounting policies are materially impacted by judgments, assumptions and estimates used in the preparation of the Consolidated Financial Statements.

Asset Retirement Obligations

The Surface Mining Control and Reclamation Act established operational, reclamation and closure standards for all aspects of surface mining as well as most aspects of deep mining. The Company accrues for the costs of current coal mine disturbance and final coal mine and gas well closure, including the cost of treating mine water discharge where necessary. Estimates of the Company's total asset retirement obligations, which are based upon permit requirements and Company engineering expertise related to these requirements, including the current portion, were approximately \$248 million at December 31, 2024. This liability is reviewed annually, or when events and circumstances indicate an adjustment is necessary, by Company management and engineers. The estimated liability can significantly change if actual costs vary from assumptions or if governmental regulations change significantly.

Accounting for asset retirement obligations requires that the fair value of an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. For active locations, the present value of the estimated asset retirement obligations is capitalized as part of the carrying amount of the long-lived asset. For locations that have been fully depleted or closed, the present value of a change in the estimated value of the obligation is recorded directly to the consolidated statements of income. Asset retirement obligations primarily relate to the reclamation of land upon mine closure, the treatment of mine water discharge where necessary, and the plugging of gas wells acquired for mining purposes. Changes in the assumptions used to calculate the liabilities can have a significant effect on the asset retirement obligations. The amounts of assets and liabilities recorded are dependent upon a number of variables, including the estimated future expenditures, estimated mine lives, assumptions involving inflation rates and the assumed credit-adjusted risk-free interest rate.

Accounting for asset retirement obligations also requires depreciation of the capitalized asset retirement obligation and accretion of the asset retirement obligation over time. The depreciation will generally be determined on a units-of-production basis, whereas accretion will be recognized until the reclamation obligations are satisfied.

The Company believes that the accounting estimates related to asset retirement obligations are "critical accounting estimates" because the Company must assess the expected amount and timing of asset retirement obligations. In addition, the Company must determine the estimated present value of future liabilities. Future results of operations for any particular quarterly or annual period could be materially affected by changes in the Company's assumptions.

Income Taxes

Deferred tax assets and liabilities are recognized using enacted tax rates for the estimated future tax effects of temporary differences between the book and tax basis of recorded assets and liabilities. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion of the deferred tax asset will not be realized. At December 31, 2024, the Company had deferred tax liabilities in excess of deferred tax assets of approximately \$49 million.

The Company evaluates all tax positions taken on the state and federal tax filings to determine if the position is more likely than not to be sustained upon examination. For positions that meet the more likely than not to be sustained criteria, an evaluation to determine the largest amount of benefit, determined on a cumulative probability basis, that is more likely than not to be realized upon ultimate settlement is determined. A previously recognized tax position is reversed when it is subsequently determined that a tax position no longer meets the more likely than not threshold to be sustained. The evaluation of the sustainability of a tax position and the probable amount that is more likely than not is based on judgment, historical experience and on various other assumptions that the Company believes are reasonable under the circumstances. The results of these estimates, that are not readily apparent from other sources, form the basis for recognizing an uncertain tax liability. Actual results could differ from those estimates upon subsequent resolution of identified matters. No liability for uncertain tax positions was recorded at December 31, 2024. At December 31, 2023, the Company had a liability for uncertain tax positions of \$2 million recorded in Other Accrued Liabilities and Deferred Income Taxes.

The Company believes that accounting estimates related to income taxes are “critical accounting estimates” because the Company must assess the likelihood that deferred tax assets will be recovered from future taxable income and exercise judgment regarding the amount of financial statement benefit to record for uncertain tax positions. When evaluating whether or not a valuation allowance must be established on deferred tax assets, the Company exercises judgment in determining whether it is more likely than not (a likelihood of more than 50%) that some portion or all of the deferred tax assets will not be realized. The Company considers all available evidence, both positive and negative, to determine whether, based on the weight of the evidence, a valuation allowance is needed, including carrybacks, tax planning strategies, reversal of deferred tax assets and liabilities and forecasted future taxable income. In making the determination related to uncertain tax positions, the Company considers the amounts and probabilities of the outcomes that could be realized upon ultimate settlement of an uncertain tax position using the facts, circumstances and information available at the reporting date to establish the appropriate amount of financial statement benefit. To the extent that an uncertain tax position or valuation allowance is established or increased or decreased during a period, the Company must include an expense or benefit within tax expense in the income statement. Future results of operations for any particular quarterly or annual period could be materially affected by changes in the Company’s assumptions. At December 31, 2024 and 2023, no valuation allowance was recorded.

Impairment of Long-Lived Assets

The Company reviews the carrying value of its long-lived assets whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Long-lived assets are not reviewed for impairment unless an impairment indicator is noted. Examples of impairment indicators include:

- a significant decrease in the market price of a long-lived asset;
- a significant adverse change in the extent or manner in which a long-lived asset is being used or in its physical condition;
- a significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset, including an adverse action of assessment by a regulator;
- an accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset;
- a current period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset; or
- a current expectation that, more likely than not, a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life. The term more likely than not refers to a level of likelihood that is more than 50 percent.

The above factors are not all inclusive, and management routinely evaluates whether impairment indicators are present. If one or more of the above events or changes in circumstances occur, the Company performs a recoverability test, which compares the projected undiscounted cash flows from the use and eventual disposition of a long-lived asset or asset group to its carrying value. Individual assets are grouped for impairment review purposes based on the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets. If the carrying value of a long-lived asset exceeds the future undiscounted cash flows expected from the asset, the amount of impairment recorded is measured as the difference between the asset’s carrying value and the estimated fair value of the asset, determined using discounted future cash flows. The fair value of impaired assets is typically determined based on various factors, including

the present values of expected future cash flows using a risk-adjusted discount rate, the marketability of coal properties and the estimated fair value of assets that could be sold or used at other operations.

Assumptions about sales, operating margins, capital expenditures and sales prices are based on the Company's forecasts, business plans, economic projections, and anticipated future cash flows. No indicators of impairment were present and, therefore, no impairment losses were recorded during the years ended December 31, 2024, 2023 and 2022.

Liquidity and Capital Resources

The Company's potential sources of liquidity include cash generated from operations, cash on hand, short-term investments of U.S. Treasury securities, borrowings under the revolving credit facility and securitization facility (which are discussed below), and, if necessary, the ability to issue additional equity or debt securities. The Company believes that cash generated from these sources, without needing to issue additional equity or debt securities, will be sufficient to meet its short-term working capital requirements, long-term capital expenditure requirements, and debt servicing obligations, as well as to provide required letters of credit.

On January 14, 2025, the Company completed its previously announced merger of equals transaction with Arch pursuant to the Merger Agreement. In conjunction with the Merger, the Company purchased an aggregate principal amount of \$98 million of the outstanding (i) Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2020, and (ii) Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2021 (together, the "Arch Bonds"), which were issued by the West Virginia Economic Development Authority for the benefit of Arch. The Company also consented to the release of all liens, mortgages and security interests granted or purported to be granted pursuant to the security documents relating to the Arch Bonds and to the termination of all such security documents. The \$98 million of Arch Bonds purchased by the Company constitute all of the outstanding Arch Bonds.

Also in connection with the Merger, the Company entered into an amendment to its existing Revolving Credit Facility. The amendment increases the available revolving commitments from \$355 million to \$600 million and extends the maturity date of the Revolving Credit Facility to April 30, 2029. The Revolving Credit Facility now includes participation from 22 banks, including nine new lenders, and 37% of the total commitments come from new lenders, while 63% are from existing lenders. Additionally, the Company reduced the annual interest rate by 75 bps while further enhancing financial flexibility.

During the year ended December 31, 2024, the Company generated cash flows from operating activities of approximately \$476 million and utilized a portion of operating cash flows to repurchase outstanding shares of the Company's common stock. Our total liquidity as of December 31, 2024 was comprised of the following:

<i>(in millions)</i>	December 31, 2024	
Cash and Cash Equivalents	\$	408
Short-Term Investments		52
		<u>460</u>
Securitization Facility - Current Availability		72
Revolving Credit Facility - Current Availability		355
Less: Letters of Credit Outstanding		(179)
Total Liquidity	\$	<u><u>708</u></u>

Events that negatively impact our overall financial condition and liquidity could result in our inability to comply with our credit facility's financial covenants. This could limit our access to our credit facilities if we are unable to obtain waivers from our lenders or amend the credit facilities. Additionally, access to capital remains challenging for the Company's industry as a result of banking, institutional and investor environmental, social and governance ("ESG") requirements and limitations, which tend to discourage investment in coal and other fossil fuel companies. However, the Company expects to maintain adequate liquidity through its operating cash flow, cash and cash equivalents on hand, and short-term investments, as well as its revolving credit facility and securitization facility, to fund its working capital needs and capital expenditures in the short-term and long-term.

Uncertainty in the financial markets brings additional potential risks to the Company. These risks include a reduction of our ability to raise capital in the equity markets, less availability and higher costs of additional credit and potential counterparty defaults. Overall market disruptions, including as a result of recent or additional bank failures, high interest rates and sustained high inflation, may impact the Company's collection of trade receivables. As a result, the

Company regularly monitors the creditworthiness of its customers and counterparties and manages credit exposure through payment terms, credit limits, prepayments and security.

In October 2024, the Company and the Pennsylvania Department of Environmental Protection (“PADEP”) finalized agreements to form a Global Water Treatment Trust Fund, providing an approved alternative financial assurance mechanism for 22 legacy mine water treatment systems in Pennsylvania. The Company's contributions will fund future water treatment obligations, as well as replace surety bonds and related collateral requirements. Through December 2024, the Company has contributed \$12.1 million to the fund, and the PADEP has approved bond reductions totaling \$52.7 million related to 11 legacy mine water treatment systems in Pennsylvania.

Over the past few years, the insurance and surety markets have been increasingly challenging, particularly for coal companies. We have experienced rising premiums, reduced coverage and/or fewer providers willing to underwrite policies and surety bonds. Terms have generally become more unfavorable, including increases in the amount of collateral required to secure surety bonds. However, more recently, we have seen insurance rates stabilize and even decrease on certain lines of coverage, as new insurance carriers have entered the market. Further cost burdens on our ability to maintain adequate insurance and bond coverage may adversely impact our operations, financial position and liquidity.

In December 2024, the Office of Workers' Compensation Programs issued a final rule revising the regulations under the Black Lung Benefits Act related to self-insurance by coal mine operators. Under the new standard, self-insured coal mine operators are required to post additional security for the Black Lung benefit liabilities. The final rule requires a security amount equal to 100% of a self-insured operator's projected black lung liabilities. The rule became effective on January 13, 2025, and operators are required to remit the increased security amount within one year. The final rule, including any assessments, is subject to appeal.

The Company participates in the United Mine Workers of America (the “UMWA”) Combined Benefit Fund and the UMWA 1992 Benefit Plan for which benefits are reflected in the Company's consolidated financial statements when paid. These benefit arrangements may result in additional liabilities that are not recognized on the Consolidated Balance Sheet at December 31, 2024. The various multi-employer benefit plans are discussed in Note 17—Other Employee Benefit Plans in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K. The Company's total contributions under the Coal Industry Retiree Health Benefit Act of 1992 were \$3 million and \$4 million for the years ended December 31, 2024 and 2023, respectively. Based on available information at December 31, 2024, the Company's aggregate obligation for the UMWA Combined Benefit Fund and 1992 Benefit Plan is estimated to be approximately \$31 million. The Company also uses a combination of surety bonds, corporate guarantees and letters of credit to secure its financial obligations for employee-related, environmental, performance and various other items which are not reflected on the Consolidated Balance Sheet at December 31, 2024. Management believes these items will expire without being funded. See Note 23—Commitments and Contingent Liabilities in the Notes to the Consolidated Financial Statements included in Item 8 of this Form 10-K for additional details of the various financial guarantees that have been issued by the Company.

Cash Flows (in millions)

	For the Years Ended December 31,		
	2024	2023	Change
Cash Provided by Operating Activities	\$ 476	\$ 858	\$ (382)
Cash Used in Investing Activities	\$ (165)	\$ (259)	\$ 94
Cash Used in Financing Activities	\$ (107)	\$ (682)	\$ 575

Cash provided by operating activities decreased \$382 million in the period-to-period comparison, primarily due to the overall decrease in earnings at the PAMC and the CONSOL Marine Terminal and other working capital changes that occurred throughout both periods. The decrease in PAMC and CONSOL Marine Terminal earnings was partially due to the decrease in average PAMC coal revenue per ton sold, as well as the financial impact of the Francis Scott Key Bridge collapse.

Cash used in investing activities decreased \$94 million in the period-to-period comparison, primarily due to fewer reinvestments of \$34 million of U.S. Treasury securities during the year ended December 31, 2024, compared to a net investment of \$78 million into U.S. Treasury securities during the year ended December 31, 2023. During the year ended December 31, 2024, the Company contributed \$12 million to a Global Water Treatment Trust Fund associated with the Company's perpetual water treatment obligations. Capital expenditures increased \$10 million primarily due to additional airshaft construction projects, partially offset by a decrease in equipment-related expenditures and expenditures associated with the solid waste disposal project at the PAMC. The remaining variance within investing cash flows is related to the timing and magnitude of asset sales and other investing activity. The Company's capital expenditures are set forth below.

	For the Years Ended December 31,		
	2024	2023	Change
Equipment Purchases and Rebuilds	\$ 73	\$ 76	\$ (3)
Building and Infrastructure	70	55	15
Solid Waste Disposal Project	22	27	(5)
IS&T Infrastructure	4	1	3
Other	9	9	—
Total Capital Expenditures	\$ 178	\$ 168	\$ 10

Cash used in financing activities decreased \$575 million in the period-to-period comparison primarily driven by a \$328 million decrease in share repurchases. Cash outflows related to Company share repurchases totaled \$71 million in the year ended December 31, 2024, compared to \$399 million in the year ended December 31, 2023. The change in the period-to-period comparison is also due to a \$178 million decrease in net payments on indebtedness. Payments totaling \$163 million were made toward the Company's outstanding Term Loan B and Second Lien Notes during the year ended December 31, 2023, which were fully paid off in the second quarter of 2023 and the third quarter of 2023, respectively. Additionally, dividend payments decreased \$60 million year-over-year.

Revolving Credit Facility

In November 2017, the Company entered into a revolving credit facility with PNC Bank, N.A. (the "Revolving Credit Facility"). The Revolving Credit Facility has been amended several times, the most recent of which occurred in January 2025 in connection with the Merger. This amendment increased the available revolving commitments from \$355 million to \$600 million. The Revolving Credit Facility now includes participation from twenty-two banks, including nine new lenders, and 37% of the total commitments come from new lenders, while 63% are from existing lenders. Additionally, the Company reduced the applicable interest margin on its borrowings under the Revolving Credit Facility by 75 bps.

Borrowings under the Revolving Credit Facility may be used for general corporate purposes, including working capital, capital expenditures and permitted acquisitions. Amounts repaid under the Revolving Credit Facility may be reborrowed, subject to satisfaction of the conditions to each credit extension. The Credit Agreement provides that up to the full amount of the Revolving Credit Facility will be available for the issuance of letters of credit (the "Letters of Credit") by each lender under the Revolving Credit Facility, including certain Arch letters of credit that are deemed to be issued under the Revolving Credit Facility. The Company may increase the revolving credit commitments on the same terms or incur term "A" loans in an aggregate amount of up to \$150 million.

The maturity date of the Revolving Credit Facility is April 30, 2029, provided that if any Maryland Economic Development Corporation Port Facilities 5.75% Refunding Revenue Bonds due September 2025 (the "MEDCO Bonds") or Pennsylvania Economic Development Financing Authority 9.00% Solid Waste Disposal Revenue Bonds due April 2028 (the "PEDFA Bonds") are outstanding on the date that is 91 days prior to the maturity date applicable to the MEDCO Bonds or PEDFA Bonds (the "Springing Maturity Date"), and Specified Liquidity (as defined in the Credit Agreement) is less than \$250 million as of such Springing Maturity Date, then the maturity date for the Revolving Credit Facility shall be such Springing Maturity Date. Borrowings under the Revolving Credit Facility bear interest at a floating rate that is, at the Company's option, either (i) SOFR plus a SOFR adjustment of 0.10% plus an applicable margin or (ii) an alternate base rate plus an applicable margin. The applicable margin for the Revolving Credit Facility depends on the total net leverage ratio and ranges from 3.00% to 3.75% (for SOFR loans) and 2.00% to 2.75% (for alternate base rate loans), depending on the total net leverage ratio.

The Company's obligations under the Credit Agreement are fully and unconditionally guaranteed by subsidiaries of the Company that own any portion of the Company's Pennsylvania Mining Complex, its marine terminal at the Port of Baltimore and specified coal reserves. The Credit Agreement also provides that existing or future direct or indirect wholly owned material restricted subsidiaries of the Borrower will be Guarantors under the Credit Agreement, including significant subsidiaries acquired pursuant to the Merger, subject to certain customary exceptions. The January 2025 amendment provides for a post-closing period during which subsidiaries acquired pursuant to the Merger will become Guarantors under the Credit Agreement. The obligations under the Credit Agreement are secured by, subject to certain exceptions (including a limitation of pledges of equity interests in certain subsidiaries and certain thresholds with respect to real property), a first-priority lien on, among other things, (i) the Company's interest in the PAMC, (ii) the equity interests in PA Mining Complex LP held by the Company, (iii) the CONSOL Marine Terminal, (iv) the Itmann Mining Complex and (v) the 1.3 billion tons of Greenfield Reserves and Resources.

The Credit Agreement contains a number of customary affirmative covenants and a number of negative covenants, including (subject to certain exceptions) limitations on (among other things): indebtedness, liens, investments, acquisitions, asset dispositions, restricted payments, mergers, consolidations, divisions and other fundamental changes, transactions with affiliates and prepayments of junior indebtedness. The Credit Agreement will require prepayment of Revolving Credit Loans and/or Swing Loans if (x) Excess Balance Sheet Cash is greater than \$125 million and (y) the sum of Revolving Credit Loans, Swing Loans and Letter of Credit Obligations (other than in respect of undrawn Letters of Credit) is greater than 25% of the Revolving Credit Commitments, in each case as of the last day of any calendar month.

The Credit Agreement also includes financial covenants, including (i) a maximum first lien gross leverage ratio, (ii) a maximum total net leverage ratio, and (iii) a minimum interest coverage ratio. Under the Revolving Credit Facility, the maximum first lien gross leverage ratio is 1.50 to 1.00, the maximum total net leverage ratio is 2.50 to 1.00 and the minimum interest coverage ratio is 3.00 to 1.00. The Credit Agreement contains customary events of default, including with respect to a failure to make payments when due, cross-default and cross-judgment default and certain bankruptcy and insolvency events.

The Company's first lien gross leverage ratio was 0.04 to 1.00 at December 31, 2024. The Company's total net leverage ratio was (0.39) to 1.00 at December 31, 2024. The Company's interest coverage ratio was 123.54 to 1.00 at December 31, 2024. The Company was in compliance with all covenants under the Revolving Credit Facility as of December 31, 2024.

At December 31, 2024, there were no borrowings outstanding under the Revolving Credit Facility and the facility is currently only used for providing letters of credit, with \$107 million of letters of credit outstanding, leaving \$248 million of unused capacity, prior to consideration of the additional capacity to be provided by the January 2025 amendment discussed above. From time to time, the Company is required to post financial assurances to satisfy contractual and other requirements generated in the normal course of business. Some of these assurances are posted to comply with federal, state or other government agencies' statutes and regulations. The Company sometimes uses letters of credit to satisfy these requirements and these letters of credit reduce the Company's borrowing facility capacity.

Securitization Facilities

At December 31, 2024, the Company and certain of its U.S. subsidiaries are parties to a trade accounts receivable securitization facility with financial institutions for the sale on a continuous basis of eligible trade accounts receivable. In July 2022, the securitization facility was amended to, among other things, extend the maturity date to July 29, 2025.

Pursuant to the securitization facility, CONSOL Thermal Holdings LLC, an indirect, wholly-owned subsidiary of the Company, sells trade receivables to CONSOL Pennsylvania Coal Company LLC, a wholly-owned subsidiary of the Company. CONSOL Marine Terminals LLC, a wholly-owned subsidiary of the Company, and CONSOL Pennsylvania Coal Company LLC sell and/or contribute trade receivables (including receivables sold to CONSOL Pennsylvania Coal Company LLC by CONSOL Thermal Holdings LLC) to CONSOL Funding LLC, a wholly-owned subsidiary of the Company (the "SPV"). The SPV, in turn, pledges its interests in the receivables to PNC Bank, N.A., which either makes loans or issues letters of credit on behalf of the SPV. The maximum amount of advances and letters of credit outstanding under the securitization facility may not exceed \$100 million.

Loans under the securitization facility accrue interest at a reserve-adjusted market index rate equal to the applicable term SOFR rate. Loans and letters of credit under the securitization facility also accrue a program fee and a letter of credit participation fee, respectively, ranging from 2.00% to 2.50% per annum depending on the total net leverage ratio of the Company. In addition, the SPV paid certain structuring fees to PNC Capital Markets LLC and pays other customary fees to the lenders, including a fee on unused commitments equal to 0.60% per annum.

The agreements comprising the securitization facility contain various customary representations and warranties, covenants and default provisions which provide for the termination and acceleration of the commitments and loans under the securitization facility in certain circumstances including, but not limited to, failure to make payments when due, breach of representation, warranty or covenant, certain insolvency events or failure to maintain the security interest in the trade receivables, and defaults under other material indebtedness. The Company guarantees the performance of the obligations of CONSOL Thermal Holdings LLC, CONSOL Marine Terminals LLC and CONSOL Pennsylvania Coal Company LLC under the securitization, and will guarantee the obligations of any additional originators or successor servicer that may become party to the securitization. However, neither the Company nor its affiliates will guarantee collectability of receivables or the creditworthiness of obligors thereunder.

At December 31, 2024, eligible accounts receivable yielded \$72 million of borrowing capacity. At December 31, 2024, the facility had no outstanding borrowings and approximately \$72 million of letters of credit outstanding, leaving \$42 thousand of unused capacity. Costs associated with the receivables facility were \$1 million for the year ended December 31, 2024. The Company has not derecognized any receivables due to its continued involvement in the collections efforts.

On January 14, 2025 and in connection with the Merger, a subsidiary of Arch, Arch Receivable Company, LLC, as seller, another subsidiary of Arch, Arch Coal Sales Company, Inc., as initial servicer, PNC Bank, National Association, as administrator and issuer of letters of credit thereunder, and the other parties party thereto, as securitization purchasers, entered into that certain Ninth Amendment to the Third Amended and Restated Receivables Purchase Agreement (the "Securitization Facility Amendment"), which amends that certain Third Amended and Restated Receivables Purchase Agreement, dated as of October 5, 2016, as amended (the "Receivables Purchase Agreement"), which supports the issuance of letters of credit and requests for cash advances. The Securitization Facility Amendment permits the Receivables Purchase Agreement to remain outstanding following consummation of the Merger, including by amending the change of control provisions thereunder. The securitization facility for Arch matures on August 1, 2025, and has up to \$150 million of borrowing capacity.

Pennsylvania Economic Development Financing Authority Bonds

In April 2021, the Company borrowed the proceeds received from the sale of tax-exempt bonds issued by PEDFA in an aggregate principal amount of \$75 million (the "PEDFA Bonds"). The PEDFA Bonds bear interest at a fixed rate of 9.00% for an initial term of seven years. The PEDFA Bonds mature on April 1, 2051 but are subject to mandatory purchase by the Company on April 13, 2028, at the expiration of the initial term rate period. The PEDFA Bonds were issued pursuant to an indenture (the "PEDFA Indenture") dated as of April 1, 2021, by and between PEDFA and Wilmington Trust, N.A., a national banking association, as trustee (the "PEDFA Notes Trustee"). PEDFA made a loan of the proceeds of the PEDFA Bonds to the Company pursuant to a Loan Agreement (the "Loan Agreement") dated as of April 1, 2021 between PEDFA and the Company. Under the terms of the Loan Agreement, the Company agreed to make all payments of principal, interest and other amounts at any time due on the PEDFA Bonds or under the PEDFA Indenture. PEDFA assigned its rights as lender under the Loan Agreement, excluding certain reserved rights, to the PEDFA Notes Trustee. Certain subsidiaries of the Company (the "PEDFA Notes Guarantors") executed a Guaranty Agreement (the "Guaranty") dated as of April 1, 2021 in favor of the PEDFA Notes Trustee, guarantying the obligations of the Company under the Loan Agreement to pay the PEDFA Bonds when and as due. The obligations of the Company under the Loan Agreement and of the PEDFA Notes Guarantors under the Guaranty are secured by second priority liens on substantially all of the assets of the Company and the PEDFA Notes Guarantors. The Loan Agreement and Guaranty incorporate by reference covenants in the Indenture, dated as of November 13, 2017, by and between the Company and UMB Bank, N.A., a national banking association, as trustee and collateral trustee, under which the 11.00% Senior Secured Second Lien Notes due 2025 (the "Second Lien Notes") were issued, including covenants that limited the ability of the Company and certain subsidiaries of the Company, as guarantors, to (i) incur, assume or guarantee additional indebtedness or issue preferred stock; (ii) create liens to secure indebtedness; (iii) declare or pay dividends on the Company's common stock, redeem stock or make other distributions to the Company's stockholders; (iv) make investments; (v) pay or make dividends, loans or other asset transfers from the Company's restricted subsidiaries; (vi) merge or consolidate, or sell, transfer, lease or dispose of substantially all of the Company's assets; (vii) sell or otherwise dispose of certain assets, including equity interests in subsidiaries; (viii) enter into transactions with affiliates; and (ix) create unrestricted subsidiaries. These covenants were subject to important exceptions and qualifications.

Material Cash Requirements

The Company expects to make payments of \$117 million on its long-term debt obligations, including interest, in the next 12 months if it does not successfully refinance the MEDCO Bonds, which have an outstanding balance of \$103 million. Refer to Note 13 – Long-Term Debt for additional information concerning material cash requirements in future years.

The Company expects to make payments of \$11 million on its operating and finance lease obligations, including interest, in the next 12 months. Refer to Note 14 – Leases for additional information concerning material cash requirements in future years.

The Company expects to make payments of \$52 million on its employee-related long-term liabilities in the next 12 months, including obligations that the Company has under multi-employer plans. Refer to Note 15 – Pension and Other Postretirement Benefit Plans and Note 16 – Coal Workers' Pneumoconiosis and Workers' Compensation for additional information concerning material cash requirements in future years.

The Company expects to make payments of \$74 million on its environmental obligations and \$82 million on its other current financial obligations in the next 12 months.

The Company believes it will be able to satisfy these material requirements with cash generated from operations, cash on hand, short-term investments, borrowings under the revolving credit facility and securitization facility, and, if necessary, cash generated from its ability to issue additional equity or debt securities.

Debt

At December 31, 2024, the Company had total long-term debt and finance lease obligations of \$209 million outstanding, including the current portion of \$113 million. This long-term debt consisted of:

- An aggregate principal amount of \$103 million of industrial revenue bonds which were issued to finance the CONSOL Marine Terminal, which bear interest at 5.75% per annum and mature in September 2025. Interest on the industrial revenue bonds is payable March 1 and September 1 of each year. Payment of the principal and interest on the notes is guaranteed by the Company.
- An aggregate principal amount of \$75 million of PEDFA Bonds, which were issued to finance the ongoing expansion of the coal refuse disposal area at the Central Preparation Plant, which bear interest at 9.00% per annum for an initial term of seven years and mature in April 2051. Interest on the PEDFA Bonds is payable on February 1 and August 1 of each year.
- An aggregate principal amount of \$24 million of finance leases with a weighted average interest rate of 6.59%.
- Advanced royalty commitments of \$6 million with a weighted average interest rate of 8.10% per annum.
- An aggregate principal amount of \$1 million of other debt arrangements.

At December 31, 2024, the Company had no borrowings outstanding and approximately \$107 million of letters of credit outstanding under the \$355 million senior secured Revolving Credit Facility. At December 31, 2024, the Company had no borrowings outstanding and approximately \$72 million of letters of credit outstanding under the \$100 million securitization facility.

Stock and Debt Repurchases

In December 2017, the Company's Board of Directors approved a program to repurchase, from time to time, the Company's outstanding shares of common stock or its Second Lien Notes. Since the program's inception, the Company's Board of Directors amended the program on several separate occasions. The Company suspended share repurchases until the Merger was completed (see Note 25 - Subsequent Events in the Notes to the Consolidated Financial Statements in Item 8 of this Form 10-K for additional information), and this program terminated on December 31, 2024.

On February 18, 2025, the Company's Board of Directors approved a new capital return framework that involves a mix of dividends and share repurchases. The repurchase program permits the repurchase, from time to time, of the Company's outstanding shares of common stock in an aggregate amount of up to \$1 billion, subject to certain limitations in the Company's debt agreements.

During the year ended December 31, 2024, the Company repurchased and retired 747,351 shares of the Company's common stock at an average price of \$89.49 per share.

Total Equity and Dividends

Total equity attributable to the Company was \$1,568 million at December 31, 2024 and \$1,343 million at December 31, 2023. See the Consolidated Statements of Stockholders' Equity in Item 8 of this Form 10-K for additional details.

The declaration and payment of dividends by the Company is at the discretion of the Company's Board of Directors. The Revolving Credit Facility includes certain covenants limiting the Company's ability to declare and pay dividends.

The Company paid the following dividends during the year ended December 31, 2024:

Per Share	Total Paid (000s omitted)	Payment Timing	Shareholder of Record Date
\$0.25	\$7,348	September 13, 2024	August 30, 2024
\$0.25	\$7,349	November 26, 2024	November 15, 2024

On February 20, 2025, the Company announced a \$0.10/share dividend in an aggregate amount of approximately \$5.4 million, payable on March 17, 2025 to all stockholders of record as of March 3, 2025.

Recent Accounting Pronouncements

In November 2024, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2024-03 Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40). The amendments in this update improve the disclosures about a public business entity’s expenses and address requests from investors for more detailed information about the types of expenses in commonly presented expense captions. The amendments in this update require that public business entities, at each interim period and on an annual basis: (1) disclose the amounts of (a) purchases of inventory, (b) employee compensation, (c) depreciation, (d) intangible asset amortization, and (e) depreciation, depletion, and amortization recognized as part of oil- and gas-producing activities (DD&A) (or other amounts of depletion expense) included in each relevant expense caption; (2) include certain amounts that are already required to be disclosed under current generally accepted accounting principles; (3) disclose a qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively; and (4) disclose the total amount of selling expenses and, in annual reporting periods, an entity’s definition of selling expenses. The amendments in this update are effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. Early adoption is permitted. These amendments may be applied either prospectively or retrospectively. Management is currently evaluating the impact of this guidance, but with the exception of the increased disclosures summarized above, does not expect this update to have a material impact on the Company’s financial statements.

In December 2023, the FASB issued ASU 2023-09 Income Taxes (Topic 740). The amendments in this update address investor requests for more transparency about income tax information through improvements to income tax disclosures primarily related to the rate reconciliation and income taxes paid information. The amendments in this update require that public business entities on an annual basis (1) disclose specific categories in the rate reconciliation, (2) provide additional information for reconciling items that meet a quantitative threshold (if the effect of those reconciling items is equal to or greater than five percent of the amount computed by multiplying pretax income (or loss) by the applicable statutory income tax rate), (3) disclose the amount of income taxes paid (net of refunds received) disaggregated by federal (national), state, and foreign taxes, (4) disclose the amount of income taxes paid (net of refunds received) disaggregated by individual jurisdictions in which income taxes paid (net of refunds received) is equal to or greater than five percent of total income taxes paid (net of refunds received), (5) disclose income (or loss) from continuing operations before income tax expense (or benefit) disaggregated between domestic and foreign, and (6) disclose income tax expense (or benefit) from continuing operations disaggregated by federal (national), state, and foreign. The amendments in this update are effective for annual periods beginning after December 15, 2024, and should be applied prospectively. Management is currently evaluating the impact of this guidance, but with the exception of the increased disclosures summarized above, does not expect this update to have a material impact on the Company’s financial statements.

In August 2023, the FASB issued ASU 2023-05 - Business Combinations—Joint Venture Formations (Subtopic 805-60). The amendments in this update address the accounting for contributions made to a joint venture, upon formation, in a joint venture’s separate financial statements. The objectives of the amendments are to (1) provide decision-useful information to investors and other allocators of capital in a joint venture’s financial statements and (2) reduce diversity in practice. The amendments in this update do not amend the definition of a joint venture, the accounting by an equity method investor for its investment in a joint venture, or the accounting by a joint venture for contributions received after its formation. The amendments in this update are effective prospectively for all joint venture formations with a formation date on or after January 1, 2025. Existing joint ventures may elect to apply the guidance retrospectively. Management is currently evaluating the impact of this guidance, but does not expect this update to have a material impact on the Company’s financial statements.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

In addition to the risks inherent in operations, the Company is exposed to financial, market, political and economic risks. The following discussion provides additional detail regarding the Company's exposure to the risks related to changes in commodity prices, interest rates and foreign exchange rates.

Commodity Price Risk

The Company is exposed to market price risk in the normal course of selling coal. The Company sells coal in the spot market and under both short-term and multi-year contracts that may contain prices subject to pre-established price adjustments that reflect (i) variances in the quality characteristics of coal delivered to the customer beyond threshold quality characteristics specified in the applicable sales contract, (ii) the actual calorific value of coal delivered to the customer, (iii) changes in electric power prices in the markets in which the Company's customers operate, as adjusted for any factors set forth in the applicable contract, and/or (iv) changes in published indices. The Company has established risk management policies and procedures to strengthen the internal control environment of the marketing of commodities produced from its asset base.

The Company's primary method of mitigating commodity price volatility is through short-term and multi-year fixed-price contracts. During 2021, the Company initiated a targeted commodity price hedging strategy to mitigate pricing volatility inherent in a portion of the Company's 2022 physical contracts, related to variable pricing and the Company's spot export business, and secure future cash flows for export sales. The commodity market volatility increased as demonstrated by significant market pricing increases throughout 2022. Loss on Commodity Derivatives, net during the year ended December 31, 2022 was \$237 million. All of our hedging arrangements have been settled as of December 31, 2022, and no additional arrangements have been executed.

Interest Rate Risk

At December 31, 2024, the Company's aggregate principal amount of debt outstanding is predominantly under fixed-rate instruments, and only \$2 million of outstanding debt is subject to interest rate sensitivity.

Foreign Exchange Rate Risk

All of the Company's transactions are denominated in U.S. dollars, and, as a result, any fluctuations in currency exchange rates would have no impact to the Company's current financial transactions. However, because coal is sold internationally in U.S. dollars, general economic conditions in foreign markets and changes in foreign currency exchange rates may provide the Company's international competitors with a competitive advantage. If the Company's competitors' currencies decline against the U.S. dollar or against the Company's international customers' local currencies, those competitors may be able to offer lower prices for coal to the Company's customers on an exchanged adjusted basis. Furthermore, if the currencies of the Company's overseas customers were to significantly decline in value in comparison to the U.S. dollar, those customers may seek decreased prices for the coal the Company sells to them. Consequently, currency fluctuations could adversely affect the competitiveness of the Company's coal in international markets.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Core Natural Resources, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Core Natural Resources, Inc. (the Company) as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2024, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2024 and 2023, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2024, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 20, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the account or disclosures to which it relates.

Asset Retirement Obligations

Description of the Matter

The Company accrues for the costs of current coal mine disturbance and final coal mine and gas well closure, including the cost of treating mine water discharge where necessary. Estimates of the Company's asset retirement obligations are based upon permit requirements and the Company's assessment of these requirements. The total asset retirement obligations, including the current portion, were approximately \$248 million at December 31, 2024. This liability is reviewed annually, or when events and circumstances indicate an adjustment is necessary, by the Company's management and engineers. The estimated liability can significantly change if actual costs vary from the assumptions used in estimating the obligation or if governmental regulations change significantly. As discussed in Note 1 and Note 8 of the consolidated financial statements, the Company's accounting for asset retirement obligations requires that the fair value of an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made.

Auditing the amounts recorded for certain of the Company's asset retirement obligations is complex and judgmental due to the estimation that is required to determine the value of those asset retirement obligations. In particular, the estimation of value of these asset retirement obligations is dependent upon a number of factors, including the estimated future expenditures, estimated mine life, inflation rates and the assumed credit-adjusted risk-free interest rate.

How We Addressed the Matter in Our Audit

We tested controls that address the risk of material misstatement relating to the measurement of the asset retirement obligations. For example, we tested controls over management's review of the estimates of asset retirement obligations, management's review over the timing and amount of expected asset retirement costs and management's review over the assumptions discussed above.

To test the asset retirement obligations, our audit procedures included, among others, assessing the methodology used, testing the significant assumptions discussed above and testing the underlying data used by the Company in its analyses. We compared the assumptions used in developing the inflation rate and credit-adjusted risk-free rate used by management to historical trends, published reports and publicly available information. We compared the expected amounts and timing of future expenditures to historical data and evaluated the changes in those amounts. For example, we evaluated management's methodology for determining the amount and timing of asset retirement obligation costs which is utilized to measure the asset retirement obligation and analyzed current year activity, published pricing data and historical amounts. In addition, we involved our specialist to assist in our evaluation of management's estimates of the asset retirement obligations, including review of assumptions, regulatory requirements, reclamation plans and estimated future expenditures. We also tested the completeness and accuracy of the data used in the estimation of the Company's asset retirement obligations.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 2017.

Pittsburgh, Pennsylvania
February 20, 2025

CORE NATURAL RESOURCES, INC.
CONSOLIDATED STATEMENTS OF INCOME
(Dollars in thousands, except per share data)

	For the Years Ended December 31,		
	2024	2023	2022
Revenue and Other Income:			
Coal Revenue	\$ 1,786,926	\$ 2,106,366	\$ 2,018,662
Terminal Revenue	87,746	106,166	78,915
Freight Revenue	274,026	294,103	182,441
Loss on Commodity Derivatives, net	—	—	(237,024)
Miscellaneous Other Income (Note 3)	80,672	53,261	24,354
Gain on Sale of Assets	6,941	8,981	34,589
Total Revenue and Other Income	2,236,311	2,568,877	2,101,937
Costs and Expenses:			
Operating and Other Costs	1,270,696	1,120,065	949,222
Depreciation, Depletion and Amortization	223,526	241,317	226,878
Freight Expense	274,026	294,103	182,441
General and Administrative Costs	115,224	103,470	116,696
Loss on Debt Extinguishment	—	2,725	5,623
Interest Expense	22,192	29,325	52,640
Total Costs and Expenses	1,905,664	1,791,005	1,533,500
Earnings Before Income Tax	330,647	777,872	568,437
Income Tax Expense (Note 5)	44,242	121,980	101,458
Net Income	\$ 286,405	\$ 655,892	\$ 466,979
Earnings per Share:			
Total Basic Earnings per Share	\$ 9.65	\$ 19.91	\$ 13.41
Total Dilutive Earnings per Share	\$ 9.61	\$ 19.79	\$ 13.07
Dividends Declared per Common Share	\$ 0.50	\$ 2.20	\$ 2.05

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Dollars in thousands)

	For the Years Ended December 31,		
	2024	2023	2022
Net Income	\$ 286,405	\$ 655,892	\$ 466,979
Other Comprehensive Income (Loss):			
Actuarially Determined Long-Term Liability Adjustments:			
Amortization of Prior Service Credits (net of tax: \$538, \$537, \$561)	(1,867)	(1,868)	(1,844)
Recognized Net Actuarial Loss (Gain) (net of tax: (\$982), \$512, (\$2,459))	3,406	(1,782)	8,076
Curtailement Gain Recognized (net of tax: \$49, \$—, \$—)	(168)	—	—
Other Comprehensive Gain before Reclassifications (net of tax: (\$3,792), (\$1,232), (\$30,516))	13,157	4,150	99,164
Available-for-Sale Securities:			
Unrealized (Loss) Gain on Investments in Available-for-Sale Securities (net of tax: \$12, (\$23), \$—)	(41)	80	—
Derivative Instruments:			
Unrealized Gain on Cash Flow Hedges (net of tax: \$—, \$—, (\$116))	—	—	401
Other Comprehensive Income	14,487	580	105,797
Comprehensive Income	<u>\$ 300,892</u>	<u>\$ 656,472</u>	<u>\$ 572,776</u>

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands)

	December 31, 2024	December 31, 2023
ASSETS		
Current Assets:		
Cash and Cash Equivalents	\$ 408,240	\$ 199,371
Short-Term Investments (Note 6)	51,993	81,932
Accounts and Notes Receivable		
Trade Receivables, net	136,750	147,612
Other Receivables, net	25,900	12,765
Inventories (Note 9)	96,201	88,154
Other Current Assets	66,874	71,172
Total Current Assets	<u>785,958</u>	<u>601,006</u>
Property, Plant and Equipment (Note 10):		
Property, Plant and Equipment	5,764,081	5,552,404
Less—Accumulated Depreciation, Depletion and Amortization	3,842,382	3,649,281
Total Property, Plant and Equipment—Net	<u>1,921,699</u>	<u>1,903,123</u>
Other Assets:		
Right of Use Asset - Operating Leases (Note 14)	5,513	14,658
Global Water Treatment Trust Fund (Note 8)	12,054	—
Salary Retirement (Note 15)	41,938	47,246
Other Noncurrent Assets, net	112,381	108,970
Total Other Assets	<u>171,886</u>	<u>170,874</u>
TOTAL ASSETS	<u>\$ 2,879,543</u>	<u>\$ 2,675,003</u>

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands)

	December 31, 2024	December 31, 2023
LIABILITIES AND EQUITY		
Current Liabilities:		
Accounts Payable	\$ 143,635	\$ 137,243
Current Portion of Long-Term Debt (Note 13)	112,865	11,106
Operating Lease Liability, Current Portion (Note 14)	612	4,769
Other Accrued Liabilities (Note 12)	261,572	290,606
Total Current Liabilities	518,684	443,724
Long-Term Debt:		
Long-Term Debt (Note 13)	79,524	181,885
Finance Lease Obligations (Note 14)	15,270	4,182
Total Long-Term Debt	94,794	186,067
Deferred Credits and Other Liabilities:		
Postretirement Benefits Other Than Pensions (Note 15)	176,251	207,908
Pneumoconiosis Benefits (Note 16)	145,489	154,943
Asset Retirement Obligations (Note 8)	212,178	212,621
Workers' Compensation (Note 16)	36,051	39,144
Salary Retirement (Note 15)	20,073	20,808
Operating Lease Liability (Note 14)	5,466	10,385
Deferred Income Taxes (Note 5)	49,214	36,219
Other Noncurrent Liabilities	53,096	19,742
Total Deferred Credits and Other Liabilities	697,818	701,770
TOTAL LIABILITIES	1,311,296	1,331,561
Stockholders' Equity:		
Common Stock, \$0.01 Par Value; 62,500,000 Shares Authorized, 29,407,830 Shares Issued and Outstanding at December 31, 2024; 29,910,439 Shares Issued and Outstanding at December 31, 2023	294	299
Capital in Excess of Par Value	540,412	547,861
Retained Earnings	1,162,114	944,342
Accumulated Other Comprehensive Loss	(134,573)	(149,060)
TOTAL EQUITY	1,568,247	1,343,442
TOTAL LIABILITIES AND EQUITY	\$ 2,879,543	\$ 2,675,003

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Dollars in thousands)

	Common Stock	Capital in Excess of Par Value	Retained Earnings	Accumulated Other Comprehensive (Loss) Income	Total Equity
December 31, 2021	\$ 345	\$ 646,945	\$ 280,960	\$ (255,437)	\$ 672,813
Net Income	—	—	466,979	—	466,979
Actuarially Determined Long-Term Liability Adjustments (Net of (\$32,414) Tax)	—	—	—	105,396	105,396
Interest Rate Hedge (Net of (\$116) Tax)	—	—	—	401	401
Comprehensive Income	—	—	466,979	105,797	572,776
Issuance of Common Stock	4	(4)	—	—	—
Repurchases of Common Stock (124,454 Shares)	(2)	(2,333)	(5,653)	—	(7,988)
Employee Stock-Based Compensation	—	7,890	—	—	7,890
Shares Withheld for Taxes	—	(6,261)	—	—	(6,261)
Dividends on Common Shares (\$2.05/share)	—	—	(71,486)	—	(71,486)
Dividend Equivalents Earned on Stock-Based Compensation Awards	—	—	(1,918)	—	(1,918)
December 31, 2022	\$ 347	\$ 646,237	\$ 668,882	\$ (149,640)	\$ 1,165,826
Net Income	—	—	655,892	—	655,892
Actuarially Determined Long-Term Liability Adjustments (Net of (\$183) Tax)	—	—	—	500	500
Investments in Available-for-Sale Securities (Net of (\$23) Tax)	—	—	—	80	80
Comprehensive Income	—	—	655,892	580	656,472
Issuance of Common Stock	4	(4)	—	—	—
Repurchases of Common Stock (5,224,016 Shares)	(52)	(95,587)	(299,753)	—	(395,392)
Excise Tax on Repurchases of Common Stock	—	—	(3,729)	—	(3,729)
Employee Stock-Based Compensation	—	10,046	—	—	10,046
Shares Withheld for Taxes	—	(12,831)	—	—	(12,831)
Dividends on Common Shares (\$2.20/share)	—	—	(75,474)	—	(75,474)
Dividend Equivalents Earned on Stock-Based Compensation Awards	—	—	(1,476)	—	(1,476)
December 31, 2023	\$ 299	\$ 547,861	\$ 944,342	\$ (149,060)	\$ 1,343,442
Net Income	—	—	286,405	—	286,405
Actuarially Determined Long-Term Liability Adjustments (Net of (\$4,187) Tax)	—	—	—	14,528	14,528
Investments in Available-for-Sale Securities (Net of \$12 Tax)	—	—	—	(41)	(41)
Comprehensive Income	—	—	286,405	14,487	300,892
Issuance of Common Stock	2	(2)	—	—	—
Repurchases of Common Stock (747,351 Shares)	(7)	(13,671)	(53,200)	—	(66,878)
Excise Tax on Repurchases of Common Stock	—	—	(537)	—	(537)
Employee Stock-Based Compensation	—	11,350	16	—	11,366
Shares Withheld for Taxes	—	(5,126)	—	—	(5,126)
Dividends on Common Shares (\$0.50/share)	—	—	(14,697)	—	(14,697)
Dividend Equivalents Earned on Stock-Based Compensation Awards	—	—	(215)	—	(215)
December 31, 2024	\$ 294	\$ 540,412	\$ 1,162,114	\$ (134,573)	\$ 1,568,247

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Dollars in thousands)

	For the Years Ended December 31,		
	2024	2023	2022
Cash Flows from Operating Activities:			
Net Income	\$ 286,405	\$ 655,892	\$ 466,979
Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities:			
Depreciation, Depletion and Amortization	223,526	241,317	226,878
Stock-Based Compensation	11,350	10,046	7,890
Gain on Sale of Assets	(6,941)	(8,981)	(34,589)
Amortization of Debt Issuance Costs	3,750	5,468	8,314
Loss on Debt Extinguishment	—	2,725	5,623
Deferred Income Taxes	8,820	14,121	49,387
Other Adjustments to Net Income	(2,795)	(3,418)	3,880
Changes in Operating Assets:			
Trade and Other Receivables	(2,233)	36,922	(52,577)
Inventories	(8,018)	(21,540)	(3,020)
Other Current Assets	(444)	(4,673)	2,883
Changes in Other Assets	7,936	(11,725)	(26,063)
Changes in Operating Liabilities:			
Accounts Payable	4,570	11,449	39,235
Commodity Derivatives, net Liability	—	(15,142)	(37,062)
Other Operating Liabilities	(25,420)	3,063	14,453
Changes in Other Liabilities	(24,116)	(57,575)	(21,221)
Net Cash Provided by Operating Activities	476,390	857,949	650,990
Cash Flows from Investing Activities:			
Capital Expenditures	(177,988)	(167,791)	(171,506)
Proceeds from Sales of Assets	7,396	4,255	21,538
Investments in Mining-Related Activities	(4,620)	(7,481)	—
Proceeds from Sales of Short-Term Investments	100,982	122,658	—
Purchases of Short-Term Investments	(66,963)	(200,870)	—
Other Investing Activity	(23,838)	(10,203)	7,790
Net Cash Used in Investing Activities	(165,031)	(259,432)	(142,178)
Cash Flows from Financing Activities:			
Payments on Finance Lease Obligations	(10,518)	(25,335)	(24,511)
Payments on Term Loan A	—	—	(41,250)
Payments on Term Loan B	—	(63,590)	(175,687)
Payments on Second Lien Notes	—	(101,832)	(52,074)
Payments on Other Debt	(955)	(981)	(840)
Shares Withheld for Taxes	(5,126)	(12,831)	(6,261)
Repurchases of Common Stock	(70,879)	(399,379)	—
Debt Issuance and Financing Fees	—	(2,779)	(7,957)
Payments of Excise Tax on Share Repurchases	(3,747)	—	—
Dividends and Dividend Equivalents Paid	(15,860)	(75,474)	(71,486)
Net Cash Used in Financing Activities	(107,085)	(682,201)	(380,066)
Net Increase (Decrease) in Cash and Cash Equivalents and Restricted Cash	204,274	(83,684)	128,746
Cash and Cash Equivalents and Restricted Cash at Beginning of Period	243,268	326,952	198,206
Cash and Cash Equivalents and Restricted Cash at End of Period	\$ 447,542	\$ 243,268	\$ 326,952

The accompanying notes are an integral part of these financial statements.

CORE NATURAL RESOURCES, INC.
NOTES TO AUDITED CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1—SIGNIFICANT ACCOUNTING POLICIES:

On January 14, 2025, CONSOL Energy Inc., a Delaware corporation, completed its previously announced all-stock merger of equals transaction (the “Merger”) with Arch Resources, Inc., a Delaware corporation (“Arch”), pursuant to that certain Agreement and Plan of Merger, dated as of August 20, 2024 (the “Merger Agreement”), by and among CONSOL Energy Inc., Mountain Range Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of CONSOL Energy Inc. (“Merger Sub”), and Arch. Pursuant to the terms of the Merger Agreement, Merger Sub merged with and into Arch, with Arch continuing as the surviving corporation and as a wholly-owned subsidiary of the Company. Additionally, pursuant to the Merger Agreement, the Company was renamed “Core Natural Resources, Inc.”

Since the Merger occurred subsequent to the end of the reporting period, information set forth herein does not include the information of Arch. Accordingly, unless otherwise specifically noted, references herein to “Core Natural Resources,” “Core,” “we,” “our,” “us,” “our Company” and “the Company” refer only to Core and its subsidiaries prior to the Merger and do not include Arch and its subsidiaries.

A summary of the significant accounting policies of the Company is presented below. These, together with the other notes that follow, are an integral part of the Consolidated Financial Statements.

Basis of Presentation

The Consolidated Financial Statements include the accounts of the Company and its wholly-owned and majority-owned and/or controlled subsidiaries. All significant intercompany transactions and accounts have been eliminated in consolidation.

All dollar amounts discussed in these Notes to Consolidated Financial Statements are in thousands of U.S. dollars, except for share and per share amounts, and unless otherwise indicated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses, as well as various disclosures. Actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand and on deposit at banking institutions as well as all highly liquid short-term securities with original maturities of three months or less.

Restricted Cash

Restricted cash includes cash collateral supporting the Company's surety bond portfolio and letters of credit issued under the Company's accounts receivable securitization program. Restricted cash also includes the unused proceeds of tax-exempt bonds issued by the Pennsylvania Economic Development Financing Authority (“PEDFA”). As of December 31, 2024, the Company had \$39,302 in restricted cash. As of December 31, 2023, the Company had \$43,897 in restricted cash. These restricted cash balances are included in Other Current Assets in the accompanying Consolidated Balance Sheets.

Trade Receivables and Allowance for Credit Losses

Trade receivables are recorded at the invoiced amount. Credit is extended based on an evaluation of a customer's financial condition, a customer's ability to perform its obligations and other relevant factors. See Note 7 - Credit Losses for additional information regarding the Company's measurement of expected credit losses. There were no material financing receivables with a contractual maturity greater than one year at December 31, 2024 and 2023.

Inventories

Inventories are stated at the lower of cost or net realizable value. The cost of coal inventories is determined by the first-in, first-out (FIFO) method. Coal inventory costs include labor, supplies, equipment costs, operating overhead, depreciation, depletion, amortization and other related costs. The cost of supplies inventory is determined by the average cost method and includes operating and maintenance supplies to be used in the Company's coal operations.

Property, Plant and Equipment

Property, plant and equipment is recorded at cost upon acquisition. Expenditures that extend the useful lives of existing plant and equipment are capitalized. Interest costs applicable to major asset additions are capitalized during the construction period. Costs of additional mine facilities required to maintain production after a mine reaches the production stage, generally referred to as “receding face costs,” are expensed as incurred; however, the costs of additional airshafts and new portals are capitalized. Planned major maintenance costs that do not extend the useful lives of existing plant and equipment are expensed as incurred.

Coal exploration costs are expensed as incurred. Coal exploration costs include those incurred to ascertain existence, location, extent or quality of ore or minerals before beginning the development stage of the mine. Costs of developing new underground mines and certain underground expansion projects are capitalized. Underground development costs, which are costs incurred to make the mineral physically accessible, include costs to prepare property for shafts, driving main entries for ventilation, haulage, personnel, construction of airshafts, roof protection and other facilities.

Airshafts and capitalized mine development associated with a coal reserve are amortized on a units-of-production basis as the coal is produced so that each ton of coal is assigned a portion of the unamortized costs. The Company employs this method to match costs with the related revenues realized in a particular period. Rates are updated when revisions to coal reserve estimates are made. Coal reserve estimates are reviewed when information becomes available that indicates a reserve change is needed, or at a minimum once a year. Any material effect from changes in estimates is disclosed in the period the change occurs. Amortization of development costs begins when the development phase is complete and the production phase begins. At an underground mine, the end of the development phase and the beginning of the production phase takes place when construction of the mine for economic extraction is substantially complete. Coal extracted during the development phase is incidental to the mine’s production capacity and is not considered to shift the mine into the production phase.

Coal reserves are either owned in fee or controlled by lease. The duration of the leases vary; however, the lease terms are generally extended automatically to the exhaustion of economically recoverable reserves, as long as active mining continues. Coal interests held by lease provide the same rights as fee ownership for mineral extraction and are legally considered real property interests. Depletion of leased coal interests is computed using the units-of-production method over recoverable coal reserves. The Company also makes advance payments (advanced mining royalties) to lessors under certain lease agreements that are recoupable against future production, and it makes payments that are generally based upon a specified rate per ton or a percentage of gross realization from the sale of the coal. The Company evaluates its properties, including advance mining royalties and leased coal interests, for impairment indicators whenever events or circumstances indicate that the carrying amount may not be recoverable.

Costs to obtain coal lands are capitalized based on the cost at acquisition and are amortized using the units-of-production method over all estimated recoverable reserve tons assigned and accessible to the mine. Recoverable coal reserves are estimated on a clean coal ton equivalent, which excludes nonrecoverable coal reserves and anticipated central preparation plant processing refuse. Rates are updated when revisions to coal reserve estimates are made. Coal reserve estimates are reviewed when events and circumstances indicate a reserve change is needed, or at a minimum once a year. Amortization of coal interests begins when the coal reserve is produced. At an underground mine, a ton is considered produced once it reaches the surface area of the mine. Any material effect from changes in estimates is disclosed in the period the change occurs.

When properties are retired or otherwise disposed, the related cost and accumulated depreciation are removed from the respective accounts and any profit or loss on disposition is recognized in Gain on Sale of Assets in the Consolidated Statements of Income.

Depreciation of plant and equipment is calculated using the straight-line method over the estimated useful lives or lease terms, generally as follows:

	Years
Buildings and improvements	10 to 45
Machinery and equipment	3 to 25
Leasehold improvements	Life of Lease

Capitalization of Interest

Interest costs associated with the development of significant properties and projects are capitalized until the project is substantially complete and ready for its intended use. A weighted average cost of borrowing rate is used. For the years ended December 31, 2024, 2023 and 2022, capitalized interest totaled \$6,106, \$3,981 and \$5,425, respectively.

Impairment of Long-lived Assets

Impairment of long-lived assets or asset groups is recorded when indicators of impairment are present and the undiscounted cash flows estimated to be generated by those assets are less than the assets' or asset groups' carrying value. The carrying value of the assets is then reduced to its estimated fair value which is usually measured based on an estimate of future discounted cash flows. There were no indicators of impairment and, therefore, no impairment losses were recorded during the years ended December 31, 2024, 2023 and 2022.

Income Taxes

The Company files a consolidated federal income tax return and utilizes the asset and liability method to account for income taxes. The provision for income taxes represents amounts paid or estimated to be payable, net of amounts refunded or estimated to be refunded, for the current year and the change in deferred taxes, exclusive of amounts recorded in Other Comprehensive Income (Loss). Any refinements to prior years' taxes made due to subsequent information are reflected as adjustments in the current period.

Deferred income tax assets and liabilities are determined based on temporary differences between the financial reporting and tax bases of assets and liabilities and are recognized using enacted tax rates for the effect of such temporary differences. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

In accounting for uncertainty in income taxes of a tax position taken or expected to be taken in a tax return, the Company utilizes a recognition threshold and measurement attribute for the financial statement recognition and measurement. The recognition threshold requires the Company to determine whether it is more likely than not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position in order to record any financial statement benefit. If it is more likely than not that a tax position will be sustained, then the Company must measure the tax position to determine the amount of benefit to recognize in the financial statements. The tax position is measured at the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement.

Postretirement Benefits Other Than Pensions

Postretirement benefit obligations established by the Coal Industry Retiree Health Benefit Act of 1992 (the "Coal Act") are treated as a multi-employer plan which requires expense to be recorded for the associated obligations as payments are made. Postretirement benefits other than pensions, except for those established pursuant to the Coal Act, are accounted for in accordance with the Retirement Benefits Compensation and Non-retirement Postemployment Benefits Compensation Topics, which requires employers to accrue the cost of such retirement benefits for the employees' active service periods. Such liabilities are determined on an actuarial basis and the Company administers these liabilities through a combination of self-insured and fully insured agreements. Differences between actual and expected results or changes in the value of obligations are recognized through Other Comprehensive Income (Loss).

Pneumoconiosis Benefits and Workers' Compensation

The Company is required by federal and state statutes to provide benefits to certain current and former totally disabled employees or their dependents for awards related to coal workers' pneumoconiosis. The Company is also required by various state statutes to provide workers' compensation benefits for employees who sustain employment-related physical injuries or some types of occupational disease. Workers' compensation benefits include compensation for disability, medical costs, and on some occasions, the cost of rehabilitation. The Company is primarily self-insured for these benefits. Provisions for estimated benefits are determined on an actuarial basis.

Asset Retirement Obligations

Mine closing costs and costs associated with dismantling and removing de-gasification facilities are accrued using the accounting treatment prescribed by the Asset Retirement and Environmental Obligations Topic. This topic requires the fair value of an asset retirement obligation be recognized in the period in which it is incurred if a reasonable estimate of fair value can be made. For active locations, the present value of the estimated asset retirement obligation is capitalized as part of the carrying amount of the long-lived asset. For locations that have been fully depleted or closed, the present value of the change is recorded directly to the consolidated statements of income. Generally, the capitalized asset retirement obligation is depreciated on a units-of-production basis. Accretion of the asset retirement obligation is recognized over time and until the reclamation obligations are satisfied. Accretion is included in Depreciation, Depletion and Amortization on the Consolidated Statements of Income. Asset retirement obligations primarily relate to the closure of mines, which includes treatment of water and the reclamation of land upon exhaustion of coal reserves. Accrued mine closing costs, perpetual water treatment costs, reclamation and costs associated with dismantling and removing de-gasification facilities are regularly reviewed by management and are revised for changes in future estimated costs and regulatory requirements, in each case if and as applicable.

Subsidence

Subsidence occurs when there is sinking or shifting of the ground surface due to the removal of underlying coal. Areas affected may include, although are not limited to, streams, property, roads, pipelines and other land and surface structures. Total estimated subsidence-related obligations are recognized in the period when the related coal has been extracted and are included in Operating and Other Costs on the Consolidated Statements of Income and Other Accrued Liabilities on the Consolidated Balance Sheets. On occasion, the Company may elect to prepay for estimated damages prior to undermining the property, in return for a release of liability. Prepayments are included as assets and are either recognized as Other Current Assets or in Other Noncurrent Assets on the Consolidated Balance Sheets if the payment is made less than or greater than one year, respectively, prior to undermining the property.

Retirement Plans

The Company has non-contributory defined benefit retirement plans. In 2015, the Company's qualified defined benefit retirement plan was frozen. The benefits for these plans are based primarily on years of service and employees' pay. These plans are accounted for using the guidance outlined in the Compensation - Retirement Benefits Topic. The costs of these retiree benefits are recognized over the employees' service periods. The Company uses actuarial methods and assumptions in the valuation of defined benefit obligations and the determination of expense. Differences between actual and expected results or changes in the value of obligations and plan assets are recognized through Other Comprehensive Income (Loss).

Stock-Based Compensation

Eligible Company employees participate in equity-based compensation plans. The Company recognizes compensation expense for all stock-based compensation awards based on the grant date fair value estimated in accordance with the provisions of the Stock Compensation Topic. The Company recognizes these compensation costs on a straight-line basis over the requisite service period of the award, which is generally the award's vesting term. See Note 18 - Stock-Based Compensation for additional information.

Revenue Recognition

Coal revenue is recognized when the performance obligation has been satisfied, and the corresponding transaction price has been determined. Generally, title passes when coal is loaded at the coal preparation facilities, at terminal locations or other customer destinations. The Company's coal contract revenue per ton is fixed or determinable based upon either fixed forward pricing or pricing derived from established indices and adjusted for nominal quality characteristics. Some coal contracts also contain positive electric power price-related adjustments, which represent market-driven price adjustments, in addition to a fixed base price per ton. The Company's coal contracts generally do not allow for retroactive adjustments to pricing after title to the coal has passed and typically do not have significant financing components. See Note 2 - Revenue from Contracts with Customers for additional information.

Freight Revenue and Expense

Shipping and handling costs invoiced to coal customers and paid to third-party carriers are recorded as Freight Revenue and Freight Expense, respectively.

Contingencies

The Company is subject to various lawsuits and claims with respect to such matters as personal injury, wrongful death, damage to property, exposure to hazardous substances, governmental regulations including environmental remediation, employment and contract disputes, and other claims and actions arising out of the normal course of business. Liabilities are recorded when it is probable that obligations have been incurred and the amounts can be reasonably estimated. Estimates are developed through consultation with legal counsel involved in the defense of these matters and are based upon the nature of the lawsuit, progress of the case in court, view of legal counsel, prior experience in similar matters and management's intended response. Environmental liabilities are not discounted or reduced by possible recoveries from third-parties. Legal fees associated with defending these various lawsuits and claims are expensed when incurred.

Derivative Instruments

The Company may utilize derivative instruments to manage exposures to interest rate risk on long-term debt. The Company has, in the past, entered into interest rate swaps in order to achieve a mix of fixed and variable rate debt that it deemed appropriate. These interest rate swaps were designated as cash flow hedges of future variable interest payments and were accounted for as an asset or a liability in the accompanying Consolidated Balance Sheets at their fair value. The Company may, from time to time, also utilize derivative instruments to manage exposure to the risk of fluctuating coal prices related to forecasted or index-priced sales of coal or to the risk of changes in the fair value of a fixed price physical sales contract. The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market in order to manage its exposure to coal prices. The Company did not seek cash flow hedge accounting treatment for its commodity derivative financial instruments and therefore, changes in fair value were reflected in earnings throughout the terms of those instruments (see Note 21 - Derivatives for additional information).

In a cash flow hedge, the Company hedges the risk of changes in future cash flows related to the underlying item being hedged. Changes in the fair value of the derivative instrument used as a hedge instrument in a cash flow hedge are recorded in other comprehensive income or loss. Amounts in other comprehensive income or loss are reclassified to earnings when the hedged transaction affects earnings and are classified in a manner consistent with the transaction being hedged. The Company evaluates the effectiveness of its hedging relationships both at the hedge's inception and on an ongoing basis. Any ineffective portion of the change in fair value of a derivative instrument used as a hedge instrument in a cash flow hedge is recognized immediately in earnings.

Earnings per Share

Basic earnings per share are computed by dividing net income by the weighted average number of shares outstanding during the reporting period. Dilutive earnings per share are computed similarly to basic earnings per share, except that the weighted average number of shares outstanding is increased to include additional shares from restricted stock units and performance share units, if dilutive. The number of additional shares is calculated by assuming that outstanding restricted stock units and performance share units were released, and that the proceeds from such activities, as applicable, were used to acquire shares of common stock at the average market price during the reporting period.

The table below sets forth the share-based awards that have been excluded from the computation of diluted earnings per share because their effect would be anti-dilutive:

	For the Years Ended December 31,		
	2024	2023	2022
Anti-Dilutive Restricted Stock Units	797	1,146	942
Anti-Dilutive Performance Share Units	—	—	—
	<u>797</u>	<u>1,146</u>	<u>942</u>

The computations for basic and dilutive earnings per share are as follows:

	For the Years Ended December 31,		
	2024	2023	2022
Numerator:			
Net Income	\$ 286,405	\$ 655,892	\$ 466,979
Denominator:			
Weighted-average shares of common stock outstanding	29,683,002	32,941,654	34,811,906
Effect of dilutive shares	124,366	200,353	906,349
Weighted-average diluted shares of common stock outstanding	<u>29,807,368</u>	<u>33,142,007</u>	<u>35,718,255</u>
Earnings per Share:			
Basic	\$ 9.65	\$ 19.91	\$ 13.41
Dilutive	\$ 9.61	\$ 19.79	\$ 13.07

As of December 31, 2024, the Company has 500,000 shares of preferred stock authorized, none of which are issued or outstanding.

Shares of common stock outstanding were as follows:

	2024	2023	2022
Balance, Beginning of Year	29,910,439	34,746,904	34,480,181
Retirement Related to Stock Repurchase ⁽¹⁾	(747,351)	(5,224,016)	(124,454)
Issuance Related to Stock-Based Compensation ⁽²⁾	244,742	387,551	391,177
Balance, End of Year	<u>29,407,830</u>	<u>29,910,439</u>	<u>34,746,904</u>

(1) See Note 4 - Stock and Debt Repurchases for additional information.

(2) See Note 18 - Stock-Based Compensation for additional information.

Recent Accounting Pronouncements

In November 2024, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2024-03 Income Statement—Reporting Comprehensive Income—Expense Disaggregation Disclosures (Subtopic 220-40). The amendments in this update improve the disclosures about a public business entity's expenses and address requests from investors for more detailed information about the types of expenses in commonly presented expense captions. The amendments in this update require that public business entities, at each interim period and on an annual basis: (1) disclose the amounts of (a) purchases of inventory, (b) employee compensation, (c) depreciation, (d) intangible asset amortization, and (e) depreciation, depletion, and amortization recognized as part of oil- and gas-producing activities (DD&A) (or other amounts of depletion expense) included in each relevant expense caption; (2) include certain amounts that are already required to be disclosed under current generally accepted accounting principles; (3) disclose a qualitative description of the amounts remaining in relevant expense captions that are not separately disaggregated quantitatively; and (4) disclose the total amount of selling expenses and, in annual reporting periods, an entity's definition of selling expenses. The amendments in this update are effective for annual reporting periods beginning after December 15, 2026, and interim reporting periods beginning after December 15, 2027. Early adoption is permitted. These amendments may be applied either prospectively or retrospectively. Management is currently evaluating the impact of this guidance, but with the exception of the increased disclosures summarized above, does not expect this update to have a material impact on the Company's financial statements.

In December 2023, the FASB issued ASU 2023-09 Income Taxes (Topic 740). The amendments in this update address investor requests for more transparency about income tax information through improvements to income tax disclosures primarily related to the rate reconciliation and income taxes paid information. The amendments in this update require that public business entities on an annual basis: (1) disclose specific categories in the rate reconciliation; (2) provide additional information for reconciling items that meet a quantitative threshold (if the effect of those reconciling items is equal to or greater than five percent of the amount computed by multiplying pretax income (or loss) by the applicable

statutory income tax rate); (3) disclose the amount of income taxes paid (net of refunds received) disaggregated by federal (national), state, and foreign taxes; (4) disclose the amount of income taxes paid (net of refunds received) disaggregated by individual jurisdictions in which income taxes paid (net of refunds received) is equal to or greater than five percent of total income taxes paid (net of refunds received); (5) disclose income (or loss) from continuing operations before income tax expense (or benefit) disaggregated between domestic and foreign; and (6) disclose income tax expense (or benefit) from continuing operations disaggregated by federal (national), state, and foreign. The amendments in this update are effective for annual periods beginning after December 15, 2024, and should be applied prospectively. Management is currently evaluating the impact of this guidance, but with the exception of the increased disclosures summarized above, does not expect this update to have a material impact on the Company's financial statements.

In August 2023, the FASB issued ASU 2023-05 - Business Combinations—Joint Venture Formations (Subtopic 805-60). The amendments in this update address the accounting for contributions made to a joint venture, upon formation, in a joint venture's separate financial statements. The objectives of the amendments are to (1) provide decision-useful information to investors and other allocators of capital in a joint venture's financial statements and (2) reduce diversity in practice. The amendments in this update do not amend the definition of a joint venture, the accounting by an equity method investor for its investment in a joint venture, or the accounting by a joint venture for contributions received after its formation. The amendments in this update are effective prospectively for all joint venture formations with a formation date on or after January 1, 2025. Existing joint ventures may elect to apply the guidance retrospectively. Management is currently evaluating the impact of this guidance, but does not expect this update to have a material impact on the Company's financial statements.

NOTE 2—REVENUE FROM CONTRACTS WITH CUSTOMERS:

The following tables disaggregate the Company's revenue from contracts with customers by product type and market:

	For the Year Ended December 31, 2024		
	Domestic	Export	Total
Power Generation	\$ 649,056	\$ 212,510	\$ 861,566
Industrial	19,811	543,825	563,636
Metallurgical	44,861	316,863	361,724
Total Coal Revenue	713,728	1,073,198	1,786,926
Terminal Revenue			87,746
Freight Revenue			274,026
Other Revenue			15,708
Total Revenue from Contracts with Customers			\$ 2,164,406

	For the Year Ended December 31, 2023		
	Domestic	Export	Total
Power Generation	\$ 672,509	\$ 346,671	\$ 1,019,180
Industrial	34,453	738,189	772,642
Metallurgical	10,671	303,873	314,544
Total Coal Revenue	717,633	1,388,733	2,106,366
Terminal Revenue			106,166
Freight Revenue			294,103
Total Revenue from Contracts with Customers			\$ 2,506,635

	For the Year Ended December 31, 2022		
	Domestic	Export	Total
Power Generation	\$ 908,666	\$ 393,647	\$ 1,302,313
Industrial	19,231	391,872	411,103
Metallurgical	16,637	288,609	305,246
Total Coal Revenue	944,534	1,074,128	2,018,662
Terminal Revenue			78,915
Freight Revenue			182,441
Total Revenue from Contracts with Customers			<u>\$ 2,280,018</u>

Coal Revenue

The Company has disaggregated its coal revenue, derived from the PAMC and the Itmann Mining Complex, between domestic and export revenues, as well as between the industrial, power generation and metallurgical markets. Domestic coal revenue tends to be derived from contracts that typically have a term of one year or longer, and the pricing is typically fixed. Historically, export coal revenue tended to be derived from spot or shorter-term contracts with pricing determined closer to the time of shipment or based on a market index; however, the Company has secured several long-term export contracts with varying pricing arrangements. Coal revenue derived from the Itmann Mining Complex consists primarily of metallurgical coal sales, while coal revenue derived from the PAMC services the industrial, power generation and metallurgical markets due to the nature of its coal quality characteristics.

The Company's coal revenue is recognized when the performance obligation has been satisfied, and the corresponding transaction price has been determined. Generally, title passes when coal is loaded at the coal preparation facilities, at terminal locations or other customer destinations. The Company's coal contract revenue per ton is fixed or determinable based upon either fixed forward pricing or pricing derived from established indices and adjusted for nominal quality characteristics. Some coal contracts also contain positive electric power price-related adjustments, which represent market-driven price adjustments, in addition to a fixed base price per ton. The Company's coal contracts generally do not allow for retroactive adjustments to pricing after title to the coal has passed and typically do not have significant financing components.

The estimated transaction price from each of the Company's contracts is based on the total amount of consideration to which the Company expects to be entitled under the contract. Included in the transaction price for certain coal supply contracts is the impact of variable consideration, including quality price adjustments, handling services and per ton price fluctuations based on certain coal sales price indices. The estimated transaction price for each contract is allocated to the Company's performance obligations based on relative stand-alone selling prices determined at contract inception. The Company has determined that each ton of coal represents a separate and distinct performance obligation.

While the Company does, from time to time, experience costs of obtaining coal customer contracts with amortization periods greater than one year, those costs are generally immaterial. At December 31, 2024 and 2023, the Company did not have any capitalized costs to obtain customer contracts on its Consolidated Balance Sheets. For the years ended December 31, 2024, 2023 and 2022, the Company has not recognized any amortization of previously existing capitalized costs of obtaining customer contracts. Further, the Company has not recognized any coal revenue in the current period that is not a result of current period performance.

Terminal Revenue

Terminal revenues are attributable to the Company's CONSOL Marine Terminal and include revenues earned from providing receipt and unloading of coal from rail cars, transporting coal from the receipt point to temporary storage or stockpile facilities located at the Terminal, stockpiling, blending, weighing, sampling, redelivery, and loading of coal onto vessels. Revenues for these services are earned and performance obligations are considered fulfilled as the services are performed.

The CONSOL Marine Terminal does not normally experience material costs of obtaining customer contracts with amortization periods greater than one year. At December 31, 2024 and 2023, the Company did not have any capitalized costs to obtain customer contracts on its Consolidated Balance Sheets. For the years ended December 31, 2024, 2023 and 2022, the Company has not recognized any amortization of previously existing capitalized costs of obtaining Terminal customer contracts. Further, the Company has not recognized any Terminal revenue in the current period that is not a result of current period performance.

Freight Revenue

Some of the Company's coal contracts require that the Company sell its coal at locations other than its coal preparation plants. The cost to transport the Company's coal to the ultimate sales point is passed through to the Company's customers and the Company recognizes the freight revenue equal to the transportation costs when title to the coal passes to the customer.

Other Revenue

Other revenue consists of revenue generated from carbon products and materials businesses led by CONSOL Innovations LLC, our wholly-owned subsidiary. This revenue is primarily comprised of sales of composite tools that are used in the aerospace industry. Revenues for these products are earned and recognized as the tools are built and progress toward product completion. Additionally, other revenue consists of revenue generated from the processing of third-party coal at the Itmann Mining Complex. Revenues for these services are earned and performance obligations are considered fulfilled as the services are performed. Other revenue is included within Miscellaneous Other Income in the accompanying Consolidated Statements of Income.

Contract Balances

Contract assets, when present, are recorded separately from trade receivables in the Company's Consolidated Balance Sheets and are reclassified to trade receivables as title passes to the customer and the Company's right to consideration becomes unconditional. Credit is extended based on an evaluation of a customer's financial condition and a customer's ability to perform its obligations. The Company typically does not have material contract assets that are stated separately from trade receivables since the Company's performance obligations are satisfied as control of the goods or services passes to the customer, thereby granting the Company an unconditional right to receive consideration. Contract liabilities relate to consideration received in advance of the satisfaction of the Company's performance obligations. Contract liabilities are recognized as revenue at the point in time when control of the goods passes to the customer, or over time when services are provided.

NOTE 3—MISCELLANEOUS OTHER INCOME:

	For the Years Ended December 31,		
	2024	2023	2022
Interest Income	\$ 19,223	\$ 13,597	\$ 6,031
Royalty Income - Non-Operated Coal	18,379	8,855	10,258
Contract Assessments	15,000	16,350	—
Rental Income	1,916	2,129	2,239
Other	26,154	12,330	5,826
Miscellaneous Other Income	<u>\$ 80,672</u>	<u>\$ 53,261</u>	<u>\$ 24,354</u>

Interest income increased primarily due to the Company's investment in marketable debt securities, comprised of highly liquid U.S. Treasury securities.

Royalty income increased as a result of additional leased coal volumes related to overriding royalty agreements or coal reserve leases between the Company and third-party operators.

Contract assessment income includes penalties and fees levied against customers that did not meet the purchase obligations under their contracts with the Company. This amount also includes partial contract buyouts that involved negotiations with customers to reduce coal quantities that they otherwise were obligated to purchase under contracts in exchange for payment of certain fees to the Company, and did not impact forward contract terms.

Other income increased primarily due to additional investments in December 2023 in coal-to-product businesses led by CONSOL Innovations LLC, our wholly-owned subsidiary, as well as advancements from the Company's insurance carriers related to a claim filed as a result of the Francis Scott Key Bridge collapse on March 26, 2024, which restricted vessel access to, and export capability from, the CONSOL Marine Terminal.

NOTE 4— STOCK AND DEBT REPURCHASES:

In December 2017, the Company's Board of Directors approved a program to repurchase, from time to time, the Company's outstanding shares of common stock or its 11.00% Senior Secured Second Lien Notes due 2025 (the "Second Lien Notes"). Since the program's inception, the Company's Board of Directors amended the program on several separate occasions. The Company suspended share repurchases until the Merger was completed (see Note 25 - Subsequent Events for additional information), and this program terminated on December 31, 2024.

Under the terms of the program, the Company was permitted to make repurchases in the open market, in privately negotiated transactions, accelerated repurchase programs or in structured share repurchase programs. The Company was also authorized to enter into one or more 10b5-1 plans with respect to any of the repurchases. Any repurchases of common stock or notes were to be funded from available cash on hand or short-term borrowings. The program did not obligate the Company to acquire any particular amount of its common stock or notes, and the program could be modified or suspended at any time at the Company's discretion. The program was conducted in compliance with applicable legal requirements imposed by any credit agreement, receivables purchase agreement or indenture.

During the years ended December 31, 2024 and 2023, the Company did not make any open market repurchases of its Second Lien Notes in accordance with this program; all remaining outstanding Second Lien Notes were redeemed by the Company during the year ended December 31, 2023. During the year ended December 31, 2022, the Company spent \$26,387 to repurchase \$25,000 of its Second Lien Notes in accordance with this program. During the years ended December 31, 2024, 2023 and 2022, the Company repurchased and retired 747,351, 5,224,016 and 124,454 shares of the Company's common stock at an average price of \$89.49, \$75.69 and \$64.18 per share, respectively.

NOTE 5—INCOME TAXES:

The components of income tax expense were as follows:

	For the Years Ended December 31,		
	2024	2023	2022
Current:			
U.S. Federal	\$ 34,009	\$ 100,572	\$ 45,068
U.S. State	1,413	7,287	7,238
Non-U.S.	—	—	(235)
	<u>35,422</u>	<u>107,859</u>	<u>52,071</u>
Deferred:			
U.S. Federal	9,557	12,528	37,154
U.S. State	(737)	1,593	12,233
	<u>8,820</u>	<u>14,121</u>	<u>49,387</u>
Total Income Tax Expense	<u>\$ 44,242</u>	<u>\$ 121,980</u>	<u>\$ 101,458</u>

A reconciliation of income tax expense and the amount computed by applying the statutory federal income tax rate of 21% to income from operations before income tax is:

	For the Years Ended December 31,					
	2024		2023		2022	
	Amount	Percent	Amount	Percent	Amount	Percent
Statutory U.S. federal income tax rate	\$ 69,436	21.0 %	\$ 163,353	21.0 %	\$ 119,372	21.0 %
State income taxes, net of federal tax benefit	3,017	0.9	7,618	1.0	11,110	2.0
Effect of foreign income taxes	—	—	—	—	(241)	—
Excess tax depletion	(22,397)	(6.8)	(26,802)	(3.5)	(32,431)	(5.7)
Foreign derived intangible income	(4,501)	(1.4)	(23,545)	(3.0)	(4,906)	(0.9)
Uncertain tax positions	(1,452)	(0.4)	36	—	(792)	(0.1)
Compensation	1,480	0.5	2,284	0.3	4,178	0.7
Valuation allowance	—	—	—	—	(937)	(0.2)
Tax credits	(1,000)	(0.3)	(700)	(0.1)	(350)	(0.1)
State rate change and prior period adjustments	(644)	(0.2)	(809)	(0.1)	5,397	0.9
Other	303	0.1	545	0.1	1,058	0.2
Income Tax Expense / Effective Rate	<u>\$ 44,242</u>	<u>13.4 %</u>	<u>\$ 121,980</u>	<u>15.7 %</u>	<u>\$ 101,458</u>	<u>17.8 %</u>

Significant components of deferred tax assets and liabilities were as follows:

	December 31,	
	2024	2023
Deferred Tax Asset:		
Asset retirement obligations	\$ 40,445	\$ 41,400
Postretirement benefits other than pensions	40,226	47,730
Pneumoconiosis benefits	31,663	33,867
Other	44,735	28,280
Total Deferred Tax Asset	<u>157,069</u>	<u>151,277</u>
Deferred Tax Liability:		
Equity Partnerships	(155,039)	(122,220)
Property, plant and equipment	(39,154)	(52,409)
Other	(12,090)	(12,867)
Total Deferred Tax Liability	<u>(206,283)</u>	<u>(187,496)</u>
Net Deferred Tax Liability	<u>\$ (49,214)</u>	<u>\$ (36,219)</u>

Certain prior period amounts in the table above were previously disclosed separately, but have been reclassified to Other to conform to the current year presentation.

At December 31, 2024, the Company has net operating loss carryforwards of approximately \$1,097 for state income tax purposes, which will, if ultimately utilized, offset future taxable income. These net operating losses, if unused, will expire in 2041.

As required by U.S. GAAP, a valuation allowance is required when it is more likely than not that all or a portion of a deferred tax asset will not be realized. Management must review all available evidence, both positive and negative, in determining the need for a valuation allowance. As of December 31, 2024 and 2023, no valuation allowance has been recorded.

Unrecognized Tax Benefits

The Company utilizes the “more likely than not” standard in recognizing a tax benefit in its financial statements. For the years ended December 31, 2024 and 2023, a reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	December 31,	
	2024	2023
Balance at January 1	\$ 1,987	\$ 1,941
Additions based on tax positions related to the current year	—	22
Additions for tax positions of prior years	—	24
Settlements	(1,987)	—
Balance at December 31	<u>\$ —</u>	<u>\$ 1,987</u>

The Company recorded an unrecognized tax benefit for the tax year ending December 31, 2023 of \$1,987, related to a position taken on state taxes. The issue related to the unrecognized tax benefit was settled during 2024.

The Company is subject to taxation in the United States and its various states, as well as Canada and its various provinces. The Company is subject to examination for the tax periods 2020 through 2024 for federal and state returns.

NOTE 6—CASH AND CASH EQUIVALENTS, RESTRICTED CASH AND SHORT-TERM INVESTMENTS:

The following table disaggregates the Company's cash, cash equivalents and restricted cash, which reconciles to the total shown on the Consolidated Statements of Cash Flows:

	December 31,	
	2024	2023
Cash and Cash Equivalents	\$ 408,240	\$ 199,371
Restricted Cash - Current ⁽¹⁾	39,302	43,897
Cash and Cash Equivalents and Restricted Cash	<u>\$ 447,542</u>	<u>\$ 243,268</u>

(1) Restricted Cash - Current is included in Other Current Assets in the accompanying Consolidated Balance Sheets.

The Company has invested in marketable debt securities, primarily comprised of highly liquid U.S. Treasury securities. These investments are held in the custody of financial institutions. The securities outstanding at December 31, 2024 and 2023 are classified as available-for-sale securities, mature within twelve months of the acquisition date, and are classified as current assets accordingly.

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

	December 31, 2024				
	Amortized Cost	Allowance for Credit Losses	Gross Unrealized		Fair Value
			Gains	Losses	
U.S. Treasury Securities	\$ 51,885	\$ —	\$ 120	\$ (12)	\$ 51,993

	December 31, 2023				
	Amortized Cost	Allowance for Credit Losses	Gross Unrealized		Fair Value
			Gains	Losses	
U.S. Treasury Securities	\$ 81,829	\$ —	\$ 103	\$ —	\$ 81,932

Available-for-sale investments are reported at fair value in the accompanying balance sheet and any unrealized gains or losses are recognized in other comprehensive income (loss), net of tax. Any unrealized gains or losses in the Company's portfolio are a result of normal market fluctuations. Interest and dividends are included in net income when earned.

NOTE 7—CREDIT LOSSES:

Trade receivables are recorded at the invoiced amount. Credit is extended based on an evaluation of a customer's financial condition, a customer's ability to perform its obligations and other relevant factors. Trade receivable balances are monitored against approved credit terms. Credit terms are reviewed and adjusted as considered necessary based on changes to a customer's credit profile. If a customer's credit deteriorates, the Company may reduce credit risk exposure by reducing credit terms, obtaining letters of credit, obtaining credit insurance, or requiring pre-payment for shipments. Other non-trade contractual arrangements consist primarily of overriding royalty agreements and other financial arrangements between the Company and various counterparties.

The Company may be at risk of exposure to credit losses primarily through sales of products and services. The Company's expected loss allowance methodology for accounts receivable is developed using historical collection experience, current and future economic and market conditions and a review of the current status of customers' trade and other accounts receivables. Due to the short-term nature of such receivables, the estimate of the amount of accounts receivable that may not be collected is based on an aging of the accounts receivable balances and the financial condition of customers. Additionally, specific allowance amounts may be necessary from time to time and are established to record the appropriate provision for customers that have a higher probability of default. The Company's monitoring activities include timely account reconciliations, dispute resolution, payment confirmation and consideration of customers' financial condition and macroeconomic conditions. Balances are written off when determined to be uncollectible.

Management estimates the allowance balance using relevant available information, from internal and external sources, relating to past events, current conditions and reasonable and supportable forecasts. Historical credit loss experience provides the basis for the estimation of expected credit losses. Adjustments to historical loss information are made for changes to the assessment of anticipated payment, changes in economic conditions, current industry trends in the markets the Company serves and changes in the financial health of the Company's counterparties.

The following table provides a roll-forward of the allowance for credit losses that is deducted from the amortized cost basis of accounts receivable and other non-trade contractual arrangements to present the net amount expected to be collected.

	Trade Receivables	Other Non-Trade Contractual Arrangements
Beginning Balance, December 31, 2023	\$ 466	\$ 7,504
Provision for expected credit losses	799	121
Ending Balance, December 31, 2024	<u>\$ 1,265</u>	<u>\$ 7,625</u>

NOTE 8—ASSET RETIREMENT OBLIGATIONS:

The Company accrues for mine closing costs, perpetual water treatment costs, and costs associated with the plugging of degasification wells using the accounting treatment prescribed by the Asset Retirement and Environmental Obligations Topic of the FASB Accounting Standards Codification. The Company recognizes capitalized asset retirement obligations by increasing the carrying amount of related long-lived assets.

The reconciliation of changes in the Company's asset retirement obligations at December 31, 2024 and 2023 is as follows:

	As of December 31,	
	2024	2023
Balance at Beginning of Period	\$ 241,192	\$ 251,502
Accretion Expense	19,727	19,843
Payments	(30,089)	(22,771)
Revisions in Estimated Cash Flows	16,902	4,533
Other	—	(11,915)
Balance at End of Period	<u>\$ 247,732</u>	<u>\$ 241,192</u>

For the year ended December 31, 2023, Other consists of (\$11,915) attributed to conveyances of several gas wells to third parties.

On October 2, 2024, three Company subsidiaries voluntarily entered into a Post-Mining Discharge Treatment Trust Consent Order and Agreement (“CO&A”) with the Pennsylvania Department of Environmental Protection (“PADEP”). The CO&A serves as an approved alternative financial assurance mechanism associated with the Company's perpetual water treatment obligations located in Pennsylvania and establishes a Global Water Treatment Trust Fund (“WTTF”). The WTTF is a long-term funding mechanism for 22 legacy mine water treatment systems (“treatment systems”) in Pennsylvania. The Company intends to make annual contributions of \$2,000 until the cash balance of the fund equals 100% of the present value of future operation, maintenance and recapitalization costs for the treatment systems, currently estimated to be \$74,211. As the cash balance of the fund grows, surety bonds associated with the treatment systems will be adjusted or released by the PADEP, thereby reducing the Company's exposure to surety bonds and related collateral requirements. Through December 2024, the Company has contributed \$12,066 to the fund, and the PADEP has approved bond reductions totaling \$52,696.

During the year ended December 31, 2024, the Company's contributions into the WTTF were managed and invested, at the direction of the trustee in accordance with the trust agreement, into various debt and equity securities. These investments are held in the custody of the WTTF trustee. These investments are classified as available-for-sale securities.

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

	December 31, 2024				
	Amortized Cost	Allowance for Credit Losses	Gross Unrealized		Fair Value
			Gains	Losses	
Global WTTF Securities	\$ 12,112	\$ —	\$ 87	\$ (145)	\$ 12,054

Available-for-sale investments are reported at fair value in the accompanying balance sheet and any unrealized gains or losses are recognized in other comprehensive income (loss), net of tax. Any unrealized gains or losses in the Company's portfolio are a result of normal market fluctuations. Interest, dividends and realized gains or losses are included in net income when earned.

NOTE 9—INVENTORIES:

Inventory components consist of the following:

	December 31,	
	2024	2023
Coal	\$ 17,480	\$ 17,128
Supplies	78,721	71,026
Total Inventories	<u>\$ 96,201</u>	<u>\$ 88,154</u>

NOTE 10—PROPERTY, PLANT AND EQUIPMENT:

Property, plant and equipment consists of the following:

	December 31,	
	2024	2023
Plant and Equipment	\$ 3,633,741	\$ 3,458,655
Coal Properties and Surface Lands	913,819	906,343
Airshafts	521,334	492,806
Mine Development	366,260	366,260
Advance Mining Royalties	328,927	328,340
Total Property, Plant and Equipment	5,764,081	5,552,404
Less: Accumulated Depreciation, Depletion and Amortization	3,842,382	3,649,281
Total Property, Plant and Equipment - Net	<u>\$ 1,921,699</u>	<u>\$ 1,903,123</u>

As of December 31, 2024 and 2023, property, plant and equipment includes gross assets under finance leases of \$40,804 and \$44,622, respectively. Accumulated amortization for finance leases was \$16,929 and \$31,873 at December 31, 2024 and 2023, respectively. Amortization expense for assets under finance leases approximated \$9,814, \$25,400 and \$24,206 for the years ended December 31, 2024, 2023 and 2022, respectively, and is included in Depreciation, Depletion and Amortization in the accompanying Consolidated Statements of Income. See Note 14 - Leases for further discussion of finance leases.

NOTE 11—ACCOUNTS RECEIVABLE SECURITIZATION:

At December 31, 2024, the Company and certain of its U.S. subsidiaries are parties to a trade accounts receivable securitization facility with financial institutions for the sale on a continuous basis of eligible trade accounts receivable. In July 2022, the securitization facility was amended to, among other things, extend the maturity date to July 29, 2025.

Pursuant to the securitization facility, CONSOL Thermal Holdings LLC, an indirect, wholly-owned subsidiary of the Company, sells trade receivables to CONSOL Pennsylvania Coal Company LLC, a wholly-owned subsidiary of the Company. CONSOL Marine Terminals LLC, a wholly-owned subsidiary of the Company, and CONSOL Pennsylvania Coal Company LLC sell and/or contribute trade receivables (including receivables sold to CONSOL Pennsylvania Coal Company LLC by CONSOL Thermal Holdings LLC) to CONSOL Funding LLC, a wholly-owned subsidiary of the Company (the "SPV"). The SPV, in turn, pledges its interests in the receivables to PNC Bank, N.A., which either makes loans or issues letters of credit on behalf of the SPV. The maximum amount of advances and letters of credit outstanding under the securitization facility may not exceed \$100,000.

Loans under the securitization facility accrue interest at a reserve-adjusted market index rate equal to the applicable term Secured Overnight Financing Rate ("SOFR"). Loans and letters of credit under the securitization facility also accrue a program fee and a letter of credit participation fee, respectively, ranging from 2.00% to 2.50% per annum depending on the total net leverage ratio of the Company. In addition, the SPV paid certain structuring fees to PNC Capital Markets LLC and pays other customary fees to the lenders, including a fee on unused commitments equal to 0.60% per annum.

At December 31, 2024, the Company's eligible accounts receivable yielded \$71,964 of borrowing capacity. At December 31, 2024, the facility had no outstanding borrowings and \$71,922 of letters of credit outstanding, leaving available borrowing capacity of \$42. At December 31, 2023, the Company's eligible accounts receivable yielded \$72,125 of borrowing capacity. At December 31, 2023, the facility had no outstanding borrowings and \$72,087 of letters of credit outstanding, leaving available borrowing capacity of \$38. Costs associated with the receivables facility totaled \$1,444, \$1,423 and \$1,101 for the years ended December 31, 2024, 2023 and 2022, respectively. The Company has not derecognized any receivables due to its continued involvement in the collections efforts.

NOTE 12—OTHER ACCRUED LIABILITIES:

	December 31,	
	2024	2023
Subsidence Liability	\$ 88,259	\$ 105,322
Accrued Compensation and Benefits	54,138	73,763
Other	38,289	38,533
Current Portion of Long-Term Liabilities:		
Asset Retirement Obligations	35,554	28,571
Postretirement Benefits Other than Pensions	17,887	19,327
Pneumoconiosis Benefits	16,389	15,071
Workers' Compensation	11,056	10,019
Total Other Accrued Liabilities	<u>\$ 261,572</u>	<u>\$ 290,606</u>

Certain prior period amounts in the table above, including Accrued Other Taxes, Accrued Interest and Deferred Revenue, were previously disclosed separately, but have been reclassified to Other to conform to the current year presentation.

NOTE 13—LONG-TERM DEBT:

	December 31,	
	2024	2023
Debt:		
MEDCO Revenue Bonds in Series due September 2025 at 5.75%	\$ 102,865	\$ 102,865
9.00% PEDFA Solid Waste Disposal Revenue Bonds due April 2028	75,000	75,000
Advance Royalty Commitments (8.10% and 8.80% Weighted Average Interest Rate, respectively)	6,148	5,922
Other Debt Arrangements	664	1,419
Less: Unamortized Debt Issuance Costs	(1,213)	(1,686)
	<u>183,464</u>	<u>183,520</u>
Less: Current Portion of Long-Term Debt*	(103,940)	(1,635)
Long-Term Debt	<u>\$ 79,524</u>	<u>\$ 181,885</u>

*Excludes current portion of Finance Lease Obligations of \$8,925 and \$9,471 at December 31, 2024 and 2023, respectively, and includes unamortized debt issuance costs on the MEDCO Revenue Bonds of \$101 at December 31, 2024.

Annual undiscounted maturities on the Company's debt instruments during the next five years and thereafter are as follows:

Year ended December 31,	Amount
2025	\$ 104,041
2026	1,018
2027	943
2028	75,831
2029	649
Thereafter	2,195
Total Long-Term Debt Maturities	\$ 184,677

Revolving Credit Facility

In November 2017, the Company entered into a revolving credit facility with PNC Bank, N.A. (the "Revolving Credit Facility"). The Revolving Credit Facility has been amended several times, the most recent of which occurred in June 2023. This amendment increased the available revolving commitments from \$260,000 to \$355,000 and provides for the Company's ability to increase the revolving commitments or issue term loans in an additional amount not to exceed \$45,000 and up to an aggregate total amount of \$400,000.

Borrowings under the Company's Revolving Credit Facility bear interest at a floating rate that is, at the Company's option, either (i) SOFR plus the applicable SOFR adjustment (as defined therein) depending on the applicable interest period plus an applicable margin or (ii) an alternate base rate plus an applicable margin. The applicable margin for the Revolving Credit Facility depends on the Company's total net leverage ratio and this rate resets quarterly. Obligations under the Revolving Credit Facility are guaranteed by (i) all owners of the PAMC held by the Company, (ii) any other members of the Company's group that own any portion of the collateral securing the Revolving Credit Facility, and (iii) subject to certain customary exceptions and agreed materiality thresholds, all other existing or future direct or indirect wholly-owned restricted subsidiaries of the Company. The obligations are secured by, subject to certain exceptions (including a limitation of pledges of equity interests in certain subsidiaries and certain thresholds with respect to real property), a first-priority lien on (i) the Company's interest in the PAMC, (ii) the equity interests in PA Mining Complex LP held by the Company, (iii) the CONSOL Marine Terminal, (iv) the Itmann Mining Complex and (v) the 1.3 billion tons of Greenfield Reserves and Resources.

The Revolving Credit Facility contains a number of customary affirmative covenants and a number of negative covenants, including (subject to certain exceptions) limitations on (among other things): indebtedness, liens, investments, acquisitions, dispositions, restricted payments and prepayments of junior indebtedness. The Revolving Credit Facility also includes covenants relating to (i) a maximum first lien gross leverage ratio, (ii) a maximum total net leverage ratio, and (iii) a minimum fixed charge coverage ratio. The maximum first lien gross leverage ratio is calculated as the ratio of Consolidated First Lien Debt to Consolidated EBITDA. Consolidated EBITDA, as used in the covenant calculation, excludes non-cash compensation expenses, non-recurring transaction expenses, extraordinary gains and losses, gains and losses on discontinued operations and gains and losses on debt extinguishment. The maximum total net leverage ratio is calculated as the ratio of Consolidated Indebtedness, minus Cash on Hand, to Consolidated EBITDA. The minimum fixed charge coverage ratio is calculated as the ratio of Consolidated EBITDA to Consolidated Fixed Charges. Consolidated Fixed Charges, as used in the covenant calculation, include cash interest payments, cash payments for income taxes, scheduled debt repayments, Maintenance Capital Expenditures and cash payments related to legacy employee liabilities to the extent in excess of amounts accrued in the calculation of Consolidated EBITDA. Under the Revolving Credit Facility, the maximum first lien gross leverage ratio shall be 1.50 to 1.00, the maximum total net leverage ratio shall be 2.50 to 1.00 and the minimum fixed charge coverage ratio shall be 1.10 to 1.00.

On January 14, 2025, the Company entered into an amendment to its existing Revolving Credit Facility. The amendment removes the minimum fixed charge coverage ratio covenant, and adds a minimum interest coverage ratio covenant, which shall be 3.00 to 1.00. The following covenants at December 31, 2024 were calculated in accordance with the January 2025 Revolving Credit Facility amendment. The Company's first lien gross leverage ratio was 0.04 to 1.00 at December 31, 2024. The Company's total net leverage ratio was (0.39) to 1.00 at December 31, 2024. The Company's interest coverage ratio was 123.54 to 1.00 at December 31, 2024. The Company was in compliance with all covenants under both the pre-amended and amended Revolving Credit Facility as of December 31, 2024.

At December 31, 2024, the Revolving Credit Facility had no borrowings outstanding and \$107,087 of letters of credit outstanding, leaving \$247,913 of unused capacity. At December 31, 2023, the Revolving Credit Facility had no borrowings outstanding and \$111,186 of letters of credit outstanding, leaving \$243,814 of unused capacity. From time to time, the Company is required to post financial assurances to satisfy contractual and other requirements generated in the normal course of business. Some of these assurances are posted to comply with federal, state or other government agencies' statutes and regulations. The Company sometimes uses letters of credit to satisfy these requirements and these letters of credit reduce the Company's borrowing facility capacity.

The SPV is not a guarantor of the Revolving Credit Facility, and the SPV holds the assets pledged to the lender in the securitization facility. The SPV had total assets of \$133,853 and \$147,918, comprised mainly of \$133,694 and \$147,612 trade receivables, net, at December 31, 2024 and 2023, respectively. For the years ended December 31, 2024, 2023 and 2022, net income attributable to the SPV was \$46, \$5,129 and \$12,330, respectively, which primarily reflected intercompany fees related to purchasing the receivables, which are eliminated in the Consolidated Financial Statements contained within this Annual Report on Form 10-K. During the years ended December 31, 2024, 2023 and 2022, there were no borrowings or payments under the accounts receivable securitization facility. See Note 11 - Accounts Receivable Securitization for additional information.

PEDFA Bonds

In April 2021, the Company borrowed the proceeds received from the sale of tax-exempt bonds issued by PEDFA in an aggregate principal amount of \$75,000 (the "PEDFA Bonds"). The PEDFA Bonds bear interest at a fixed rate of 9.00% for an initial term of seven years. The PEDFA Bonds mature on April 1, 2051 but are subject to mandatory purchase by the Company on April 13, 2028, at the expiration of the initial term rate period. The PEDFA Bonds were issued pursuant to an indenture (the "PEDFA Indenture") dated as of April 1, 2021, by and between PEDFA and Wilmington Trust, N.A., a national banking association, as trustee (the "PEDFA Notes Trustee"). PEDFA made a loan of the proceeds of the PEDFA Bonds to the Company pursuant to a Loan Agreement (the "Loan Agreement") dated as of April 1, 2021 between PEDFA and the Company. Under the terms of the Loan Agreement, the Company agreed to make all payments of principal, interest and other amounts at any time due on the PEDFA Bonds or under the PEDFA Indenture. PEDFA assigned its rights as lender under the Loan Agreement, excluding certain reserved rights, to the PEDFA Notes Trustee. Certain subsidiaries of the Company (the "PEDFA Notes Guarantors") executed a Guaranty Agreement (the "Guaranty") dated as of April 1, 2021 in favor of the PEDFA Notes Trustee, guarantying the obligations of the Company under the Loan Agreement to pay the PEDFA Bonds when and as due. The obligations of the Company under the Loan Agreement and of the PEDFA Notes Guarantors under the Guaranty are secured by second priority liens on substantially all of the assets of the Company and the PEDFA Notes Guarantors. The Loan Agreement and Guaranty incorporate by reference covenants in the Indenture, dated as of November 13, 2017 by and between the Company and UMB Bank, N.A., a national banking association, as trustee and collateral trustee, under which the Second Lien Notes were issued, including covenants that limited the ability of the Company and certain subsidiaries of the Company, as guarantors, to (i) incur, assume or guarantee additional indebtedness or issue preferred stock; (ii) create liens to secure indebtedness; (iii) declare or pay dividends on the Company's common stock, redeem stock or make other distributions to the Company's stockholders; (iv) make investments; (v) pay or make dividends, loans or other asset transfers from the Company's restricted subsidiaries; (vi) merge or consolidate, or sell, transfer, lease or dispose of substantially all of the Company's assets; (vii) sell or otherwise dispose of certain assets, including equity interests in subsidiaries; (viii) enter into transactions with affiliates; and (ix) create unrestricted subsidiaries. These covenants were subject to important exceptions and qualifications.

The Company started a capital construction project on the PAMC coarse refuse disposal area in 2017, which is now funded, in part, by the proceeds from the PEDFA Bonds. The Company expects to expend these funds as qualified work is completed. The Company utilized restricted cash in the amount of \$12,247 and \$24,705 during the years ended December 31, 2024 and 2023, respectively, for qualified expenses. Additionally, the Company had \$264 and \$12,177 in restricted cash at December 31, 2024 and 2023, respectively, associated with this financing that will be used to fund future spending on the coarse refuse disposal area.

NOTE 14—LEASES:

The Company has operating leases for mining and other equipment used in operations and office space. Many leases include one or more options to renew, some of which include options to extend, the leases, and some leases include options to terminate or buy out the leases within a set period of time. In certain of the Company's lease agreements, the rental payments are adjusted periodically to reflect actual charges incurred for inflation and/or changes in other indexes. Many of the Company's operating lease payments for mining equipment contain a variable component which is calculated based upon production metrics such as feet of advance or raw tonnage mined. While most of the Company's leases contain clauses regarding the general condition of the equipment upon lease termination, they do not contain residual value guarantees.

The Company determines if an arrangement is an operating or finance lease at inception of the applicable lease. For leases where the Company is the lessee, Right of Use (“ROU”) assets represent the Company’s right to use an underlying asset for the lease term and lease liabilities represent an obligation to make lease payments arising from the lease. ROU assets and lease liabilities are recognized at the lease commencement date based on the present value of lease payments over the lease term. As most of the Company’s leases do not provide an implicit interest rate, the Company uses its incremental borrowing rate based on the information available on the commencement date in determining the present value of lease payments. The ROU asset also consists of any prepaid lease payments, lease incentives received, and costs which will be incurred in exiting a lease. The lease terms used to calculate the ROU asset and related lease liability include options to extend or terminate the lease when it is reasonably certain that the Company will exercise that option. Lease expense for operating leases is recognized on a straight-line basis over the lease term as an operating expense while the expense for finance leases is recognized as depreciation expense and interest expense using the interest method of recognition. Further, the Company made an accounting policy election not to apply the recognition and measurement requirements to short-term leases, defined as leases with an initial term of twelve months or less. The Company will recognize those lease payments in the Consolidated Statements of Income over the lease term. For the years ended December 31, 2024 and 2023, these short-term lease expenses were not material to the Company’s financial statements.

For the years ended December 31, 2024 and 2023, the components of operating lease expense were as follows:

	December 31,	
	2024	2023
Fixed operating lease expense	\$ 4,850	\$ 6,447
Variable operating lease expense	6,373	8,358
Total operating lease expense	<u>\$ 11,223</u>	<u>\$ 14,805</u>

Supplemental cash flow information related to the Company’s operating leases for the years ended December 31, 2024 and 2023 was as follows:

	December 31,	
	2024	2023
Cash paid for amounts included in the measurement of operating lease liabilities	\$ 4,787	\$ 6,148

The following table presents the lease balances within the Consolidated Balance Sheets, weighted average lease term, and the weighted average discount rate related to the Company’s operating leases at December 31, 2024 and 2023:

Lease Assets and Liabilities	Classification	December 31,	
		2024	2023
Assets:			
Operating Lease ROU Assets	Other Assets	\$ 5,513	\$ 14,658
Liabilities:			
Current:			
Operating Lease Liabilities	Operating Lease Liabilities	\$ 612	\$ 4,769
Long-Term:			
Operating Lease Liabilities	Operating Lease Liabilities	\$ 5,466	\$ 10,385
Total Operating Lease Liabilities		<u>\$ 6,078</u>	<u>\$ 15,154</u>
Weighted average remaining lease term (in years)		7.92	4.46
Weighted average discount rate		7.74 %	7.21 %

The Company also enters into finance leases for mining equipment and automobiles. Assets arising from finance leases are included in property, plant and equipment-net and the liabilities are included in current portion of long-term debt and long-term debt in the accompanying Consolidated Balance Sheets.

For the years ended December 31, 2024 and 2023, the components of finance lease expense were as follows:

	December 31,	
	2024	2023
Amortization of right of use assets	\$ 9,814	\$ 25,400
Interest expense	1,079	1,712
Total finance lease expense	\$ 10,893	\$ 27,112

The following table presents the weighted average lease term and weighted average discount rate related to the Company's finance leases as of December 31, 2024 and 2023:

	December 31, 2024	December 31, 2023
Weighted average remaining lease term (in years)	2.93	1.64
Weighted average discount rate	6.59 %	6.68 %

The following table presents the future maturities of the Company's operating and finance lease liabilities, together with the present value of the net minimum lease payments, at December 31, 2024:

	Finance Leases	Operating Leases
2025	\$ 10,241	\$ 1,058
2026	7,527	932
2027	7,318	967
2028	1,661	975
2029	102	995
Thereafter	—	3,312
Total minimum lease payments	26,849	8,239
Less amount representing interest	2,654	2,161
Present value of minimum lease payments	\$ 24,195	\$ 6,078

NOTE 15—PENSION AND OTHER POSTRETIREMENT BENEFIT PLANS:

Pension

The Company has non-contributory defined benefit retirement plans. The benefits for these plans are based primarily on years of service and employees' pay. The Company's qualified pension plan (the "Pension Plan") allows for lump-sum distributions of benefits earned up until December 31, 2005, at the employees' election. In 2015, the Company's qualified defined benefit retirement plan was frozen.

According to the Defined Benefit Plans Topic of the FASB Accounting Standards Codification, if the lump sum distributions made during a plan year, which for the Company is January 1 to December 31, exceed the total of the projected service cost and interest cost for the plan year, settlement accounting is required. Lump sum payments did not exceed this threshold during the years ended December 31, 2024, 2023, and 2022. The Company's non-qualified pension plan was frozen as of December 31, 2024.

Other Postretirement Benefit Plan

Certain subsidiaries of the Company provide medical and prescription drug benefits to retired employees covered by either the Coal Act or the National Bituminous Coal Wage Agreement of 2011.

The reconciliation of changes in the benefit obligation, plan assets and funded status of these plans at December 31, 2024 and 2023 is as follows:

	Pension Benefits at December 31,		Other Postretirement Benefits at December 31,	
	2024	2023	2024	2023
Change in benefit obligation:				
Benefit obligation at beginning of period	\$ 525,086	\$ 524,212	\$ 227,235	\$ 255,029
Service cost	1,208	1,217	—	—
Interest cost	25,724	27,027	11,031	13,044
Plan curtailments	(217)	—	—	—
Actuarial (gain) loss	(14,615)	14,061	(27,445)	(20,776)
Benefits and other payments	(45,522)	(41,431)	(16,683)	(20,062)
Benefit obligation at end of period	<u>\$ 491,664</u>	<u>\$ 525,086</u>	<u>\$ 194,138</u>	<u>\$ 227,235</u>
Change in plan assets:				
Fair value of plan assets at beginning of period	\$ 549,571	\$ 540,225	\$ —	\$ —
Actual return on plan assets	5,695	49,239	—	—
Company contributions	1,728	1,538	16,683	20,062
Benefits and other payments	(45,522)	(41,431)	(16,683)	(20,062)
Fair value of plan assets at end of period	<u>\$ 511,472</u>	<u>\$ 549,571</u>	<u>\$ —</u>	<u>\$ —</u>
Funded status:				
Noncurrent assets	\$ 41,938	\$ 47,246	\$ —	\$ —
Current liabilities	(2,057)	(1,953)	(17,887)	(19,327)
Noncurrent liabilities	(20,073)	(20,808)	(176,251)	(207,908)
Net asset (obligation) recognized	<u>\$ 19,808</u>	<u>\$ 24,485</u>	<u>\$ (194,138)</u>	<u>\$ (227,235)</u>
Amounts recognized in accumulated other comprehensive (loss) income consist of:				
Net actuarial loss (gain)	\$ 253,641	\$ 248,252	\$ (53,416)	\$ (26,249)
Prior service credit	—	—	(8,924)	(11,329)
Net amount recognized (before tax effect)	<u>\$ 253,641</u>	<u>\$ 248,252</u>	<u>\$ (62,340)</u>	<u>\$ (37,578)</u>

The components of net periodic benefit cost (credit) are as follows:

	Pension Benefits			Other Postretirement Benefits		
	For the Years Ended December 31,			For the Years Ended December 31,		
	2024	2023	2022	2024	2023	2022
Components of net periodic benefit cost (credit):						
Service cost	\$ 1,208	\$ 1,217	\$ 1,207	\$ —	\$ —	\$ —
Interest cost	25,724	27,027	16,539	11,031	13,044	7,898
Expected return on plan assets	(31,964)	(39,470)	(37,276)	—	—	—
Amortization of prior service credits	—	—	—	(2,405)	(2,405)	(2,405)
Recognized net actuarial loss (gain)	6,265	741	3,037	(278)	—	3,515
Curtailed gain recognized	(217)	—	—	—	—	—
Net periodic benefit cost (credit)	<u>\$ 1,016</u>	<u>\$ (10,485)</u>	<u>\$ (16,493)</u>	<u>\$ 8,348</u>	<u>\$ 10,639</u>	<u>\$ 9,008</u>

Expenses (credits) related to pension and other post-employment benefits are reflected in Operating and Other Costs in the Consolidated Statements of Income. Amounts reclassified out of accumulated other comprehensive (loss) income are reflected in Operating and Other Costs in the Consolidated Statements of Income.

The Company utilizes a corridor approach to amortize actuarial gains and losses that have been accumulated under the Pension Plan. Cumulative gains and losses that are in excess of 10% of the greater of either the projected benefit obligation (PBO) or the market-related value of plan assets are amortized over the expected remaining future lifetime of all plan participants for the Pension Plan. Actuarial gains or losses can result from discount rate changes, changes in underlying assumptions that affect the projected benefit obligation, changes in underlying assumptions that affect the market-related value of plan assets, as well as actual fluctuations in the market value of plan assets.

The Company also utilizes a corridor approach to amortize actuarial gains and losses that have been accumulated under the OPEB Plan. Cumulative gains and losses that are in excess of 10% of the accumulated postretirement benefit obligation (APBO) are amortized over the average future remaining lifetime of the current inactive population for the OPEB Plan.

The following table provides information related to pension plans with an accumulated benefit obligation in excess of plan assets:

	As of December 31,	
	2024	2023
Projected benefit obligation	\$ 22,130	\$ 22,762
Accumulated benefit obligation	\$ 22,130	\$ 22,464
Fair value of plan assets	\$ —	\$ —

Assumptions:

The weighted-average assumptions used to determine benefit obligations are as follows:

	Pension Obligations at December 31,		Other Postretirement Obligations at December 31,	
	2024	2023	2024	2023
Discount rate	5.66 %	5.15 %	5.60 %	5.14 %
Rate of compensation increase	4.04 %	3.93 %	—	—

The discount rates are determined using a Company-specific yield curve model (above-mean) developed with the assistance of an external actuary. The Company-specific yield curve models (above-mean) use a subset of the expanded bond universe to determine the Company-specific discount rate. Bonds used in the yield curve are rated AA by Moody's or Standard & Poor's as of the measurement date. The yield curve models parallel the plans' projected cash flows, and the underlying cash flows of the bonds included in the models exceed the cash flows needed to satisfy the Company's plans.

The weighted-average assumptions used to determine net periodic benefit costs are as follows:

	Pension Benefits For the Years Ended December 31,			Other Postretirement Benefits For the Years Ended December 31,		
	2024	2023	2022	2024	2023	2022
Discount rate	5.14 %	5.41 %	2.83 %	5.14 %	5.43 %	2.79 %
Expected long-term return on plan assets	5.59 %	5.81 %	4.75 %	—	—	—
Rate of compensation increase	3.93 %	3.89 %	3.78 %	—	—	—

The long-term rate of return is the sum of the portion of total assets in each asset class held multiplied by the expected return for that class, adjusted for expected expenses to be paid from the assets. The expected return for each class is determined using the plan asset allocation at the measurement date and a distribution of compound average returns over a 20-year time horizon. The model uses asset class returns, variances and correlation assumptions to produce the expected

return for each portfolio. The return assumptions used forward-looking gross returns influenced by the current Treasury yield curve. These returns recognize current bond yields, corporate bond spreads and equity risk premiums based on current market conditions.

The assumed health care cost trend rates are as follows:

	At December 31,	
	2024	2023
Health care cost trend rate for next year	6.01 %	6.40 %
Rate to which the cost trend is assumed to decline (ultimate trend rate)	4.00 %	4.00 %
Year that the rate reaches ultimate trend rate	2048	2048

Plan Assets:

The Company's overall investment strategy is to meet current and future benefit payment needs through diversification across asset classes, fund strategies and fund managers to achieve an optimal balance between risk and return and between income and growth of assets through capital appreciation. Consistent with the objectives of the pension trust (the "Trust") and in consideration of the Trust's current funded status and the current level of market interest rates, the Retirement Board, as appointed by the Company's Board of Directors (the "Retirement Board") has approved an asset allocation strategy that will change over time in response to future improvements in the Trust's funded status and/or changes in market interest rates. Such changes in asset allocation strategy are intended to allocate additional assets to the fixed income asset class should the Trust's funded status improve. In this framework, the current target allocation for plan assets is 10.0% diversified growth assets and 90.0% liability hedging fixed income. Both the equity and fixed income portfolios are comprised of both active and passive investment strategies. The Trust is primarily invested in Mercer Common Collective Trusts. Equity securities consist of investments in large and mid/small cap companies; non-U.S. equities are derived from both developed and emerging markets. Fixed income securities consist primarily of U.S. long duration fixed income corporate and U.S. Treasury instruments. The average quality of the fixed income portfolio must be rated at least "investment grade" by nationally recognized rating agencies. Within the fixed income asset class, investments are invested primarily across various strategies such that the overall profile strongly correlates with the interest rate sensitivity of the Trust's liabilities in order to reduce the volatility resulting from the risk of changes in interest rates and the impact of such changes on the Trust's overall financial status. Derivatives, interest rate swaps, options and futures are permitted investments for the purpose of reducing risk and to extend the duration of the overall fixed income portfolio; however, they may not be used for speculative purposes. All or a portion of the assets may be invested in mutual funds or other commingled vehicles so long as the pooled investment funds have an adequate asset base relative to their asset class; are invested in a diversified manner; and have management and/or oversight by an Investment Advisor registered with the SEC. The Retirement Board reviews the investment program on an ongoing basis including asset performance, current trends and developments in capital markets, changes in Trust liabilities and ongoing appropriateness of the overall investment policy.

The fair values of plan assets at December 31, 2024 and 2023 by asset category are as follows:

Asset Category	Fair Value Measurements at December 31, 2024				Fair Value Measurements at December 31, 2023			
	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Cash/Accrued Income	\$ 103	\$ 103	\$ —	\$ —	\$ 116	\$ 116	\$ —	\$ —
Mercer Common Collective Trusts (a)	511,369	—	—	—	549,455	—	—	—
Total	\$ 511,472	\$ 103	\$ —	\$ —	\$ 549,571	\$ 116	\$ —	\$ —

(a) Certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy but are included in the total.

There are no investments in Company stock held by these plans at December 31, 2024 or 2023.

There are no assets in the other postretirement benefit plan at December 31, 2024 or 2023.

Cash Flows:

If necessary, the Company intends to contribute to the pension trust using prudent funding methods. However, the Company does not expect to contribute to the pension plan trust in 2025. Pension benefit payments are primarily funded from the Trust. The Company expects to pay benefits of \$2,057 from the non-qualified pension plan in 2025. The Company does not expect to contribute to the other postretirement benefit plan in 2025 and intends to pay benefit claims as they become due.

The following benefit payments are expected to be paid in accordance with plan documents:

	Pension Benefits	Other Postretirement Benefits
2025	\$ 39,153	\$ 17,887
2026	\$ 40,571	\$ 17,536
2027	\$ 38,570	\$ 17,007
2028	\$ 38,519	\$ 16,661
2029	\$ 38,245	\$ 16,240
Year 2030-2034	\$ 182,302	\$ 76,625

NOTE 16—COAL WORKERS' PNEUMOCONIOSIS AND WORKERS' COMPENSATION:

Coal Workers' Pneumoconiosis

Under the Federal Coal Mine Health and Safety Act of 1969, as amended, the Company is responsible for medical and disability benefits to employees and their dependents resulting from occurrences of coal workers' pneumoconiosis (CWP) disease. The Company is also responsible under various state statutes for pneumoconiosis benefits. The Company primarily provides for these claims through a self-insurance program. The calculation of the actuarial present value of the estimated pneumoconiosis obligation is based on an annual actuarial study by independent actuaries and uses assumptions regarding disability incidence, medical costs, indemnity levels, mortality, death benefits, dependents and interest rates which are derived from actual company experience and outside sources. Actuarial gains or losses can result from discount rate changes, differences in incident rates and severity of claims filed as compared to original assumptions.

In December 2024, the Office of Workers' Compensation Programs ("OWCP") issued a final rule revising the regulations under the Black Lung Benefits Act related to self-insurance by coal mine operators. Under the new standard, self-insured coal mine operators are required to post additional security for the Black Lung benefit liabilities. The final rule requires a security amount equal to 100% of a self-insured operator's projected black lung liabilities. The rule became effective on January 13, 2025, and operators are required to remit the increased security amount within one year. The final rule, including any assessments, is subject to appeal.

Workers' Compensation

The Company must also compensate individuals who sustain employment-related physical injuries or some types of occupational diseases and, on some occasions, for costs of their rehabilitation. Workers' compensation programs will also compensate survivors of workers who suffer employment-related deaths. Workers' compensation laws are administered by state agencies, and each state has its own set of rules and regulations regarding compensation owed to an employee that is injured in the course of employment. The Company primarily provides for these claims through a self-insurance program. The Company recognizes an actuarial present value of the estimated workers' compensation obligation calculated by independent actuaries. The calculation is based on claims filed and an estimate of claims incurred but not yet reported as well as various assumptions, including discount rate, future healthcare trend rate, benefit duration and recurrence of

injuries. Actuarial gains or losses associated with workers' compensation have resulted from discount rate changes and differences in claims experience and incident rates as compared to prior assumptions.

The reconciliation of changes in the benefit obligation and funded status of these plans at December 31, 2024 and 2023 is as follows:

	CWP at December 31,		Workers' Compensation at December 31,	
	2024	2023	2024	2023
Change in benefit obligation:				
Benefit obligation at beginning of period	\$ 170,014	\$ 161,113	\$ 48,153	\$ 50,344
State administrative fees and insurance bond premiums	—	—	1,837	1,953
Service cost	2,985	2,313	5,857	5,597
Interest cost	8,264	8,285	2,289	2,514
Actuarial (gain) loss	(2,145)	13,270	1,203	(2,919)
Benefits paid	(17,240)	(14,967)	(13,232)	(9,336)
Benefit obligation at end of period	<u>\$ 161,878</u>	<u>\$ 170,014</u>	<u>\$ 46,107</u>	<u>\$ 48,153</u>
Funded status:				
Current assets	\$ —	\$ —	\$ 1,000	\$ 1,010
Current liabilities	(16,389)	(15,071)	(11,056)	(10,019)
Noncurrent liabilities	(145,489)	(154,943)	(36,051)	(39,144)
Net obligation recognized	<u>\$ (161,878)</u>	<u>\$ (170,014)</u>	<u>\$ (46,107)</u>	<u>\$ (48,153)</u>
Amounts recognized in accumulated other comprehensive (loss) income consist of:				
Net actuarial loss (gain)	\$ 1,638	\$ 4,217	\$ (22,234)	\$ (25,597)
Net amount recognized (before tax effect)	<u>\$ 1,638</u>	<u>\$ 4,217</u>	<u>\$ (22,234)</u>	<u>\$ (25,597)</u>

The components of net periodic benefit cost are as follows:

	CWP For the Years Ended December 31,			Workers' Compensation For the Years Ended December 31,		
	2024	2023	2022	2024	2023	2022
Service cost	\$ 2,985	\$ 2,313	\$ 2,905	\$ 5,857	\$ 5,597	\$ 4,920
Interest cost	8,264	8,285	5,060	2,289	2,514	1,369
Recognized net actuarial loss (gain)	434	(1,045)	4,238	(2,160)	(2,049)	(420)
State administrative fees and insurance bond premiums	—	—	—	1,837	1,953	1,817
Net periodic benefit cost	<u>\$ 11,683</u>	<u>\$ 9,553</u>	<u>\$ 12,203</u>	<u>\$ 7,823</u>	<u>\$ 8,015</u>	<u>\$ 7,686</u>

Expenses related to CWP and workers' compensation are reflected in Operating and Other Costs in the Consolidated Statements of Income. Amounts reclassified out of accumulated other comprehensive (loss) income are reflected in Operating and Other Costs in the Consolidated Statements of Income.

The Company utilizes a corridor approach to amortize actuarial gains and losses that have been accumulated under the Workers' Compensation and CWP plans. Cumulative gains and losses that are in excess of 10% of the greater of either the estimated liability or the market-related value of plan assets are amortized over the expected average remaining future service of the current active membership of the Workers' Compensation and CWP plans.

Assumptions:

The weighted-average discount rates used to determine benefit obligations and net periodic benefit costs are as follows:

	CWP For the Years Ended December 31,			Workers' Compensation For the Years Ended December 31,		
	2024	2023	2022	2024	2023	2022
Benefit obligations	5.65 %	5.14 %	5.40 %	5.58 %	5.12 %	5.38 %
Net periodic benefit costs	5.14 %	5.40 %	2.85 %	5.12 %	5.38 %	2.74 %

Discount rates are determined using a Company-specific yield curve model (above-mean) developed with the assistance of an external actuary. The Company-specific yield curve models (above-mean) use a subset of the expanded bond universe to determine the Company-specific discount rate. Bonds used in the yield curve are rated AA by Moody's or Standard & Poor's as of the measurement date. The yield curve models parallel the plans' projected cash flows, and the underlying cash flows of the bonds included in the models exceed the cash flows needed to satisfy the Company's plans.

Cash Flows:

The Company does not intend to make contributions to the CWP or Workers' Compensation plans in 2025, but it intends to pay benefit claims as they become due.

The following benefit payments, which reflect expected future claims as appropriate, are expected to be paid:

	CWP Benefits	Workers' Compensation		
		Total Benefits	Actuarial Benefits	Other Benefits
2025	\$ 16,389	\$ 11,920	\$ 10,056	\$ 1,864
2026	\$ 15,255	\$ 11,756	\$ 9,845	\$ 1,911
2027	\$ 14,211	\$ 11,967	\$ 10,008	\$ 1,959
2028	\$ 13,394	\$ 12,347	\$ 10,339	\$ 2,008
2029	\$ 12,808	\$ 12,514	\$ 10,456	\$ 2,058
Year 2030-2034	\$ 60,841	\$ 66,319	\$ 55,231	\$ 11,088

NOTE 17—OTHER EMPLOYEE BENEFIT PLANS:

UMWA Benefit Trusts

The Coal Act created two multi-employer benefit plans: (1) the United Mine Workers of America (the "UMWA") Combined Benefit Fund (the "Combined Fund") into which the former UMWA Benefit Trusts were merged, and (2) the UMWA 1992 Benefit Plan (the "1992 Benefit Plan"). The Company accounts for required contributions to these multi-employer trusts as expense when incurred.

The Combined Fund provides medical and death benefits for all beneficiaries of the former UMWA Benefit Trusts who were actually receiving benefits as of July 20, 1992. The 1992 Benefit Plan provides medical and death benefits to orphan UMWA-represented members eligible for retirement on February 1, 1993 and for those who retired between July 20, 1992 and September 30, 1994. The Coal Act provides for the assignment of beneficiaries to former employers and the allocation of unassigned beneficiaries (referred to as orphans) to companies using a formula set forth in the Coal Act. The Coal Act requires that responsibility for funding the benefits to be paid to beneficiaries be assigned to their former signatory employers or related companies. This cost is recognized when contributions are assessed. The Company's total contributions under the Coal Act were \$3,040, \$3,552 and \$4,099 for the years ended December 31, 2024, 2023 and 2022,

respectively. Based on available information at December 31, 2024, the Company's gross obligation for the Combined Fund and 1992 Benefit Plan is estimated to be approximately \$30,594.

Pursuant to the provisions of the Tax Relief and Healthcare Act of 2006 (the "2006 Act") and the 1992 Benefit Plan, the Company is required to provide security in an amount based on the annual cost of providing health care benefits for all individuals receiving benefits from the 1992 Benefit Plan who are attributable to the Company, plus all individuals receiving benefits from an individual employer plan maintained by the Company who are entitled to receive such benefits. In accordance with the terms of the 2006 Act and the 1992 Benefit Plan, the Company must secure its obligations by posting letters of credit, which were \$12,315, \$12,890 and \$15,221 at December 31, 2024, 2023 and 2022, respectively. The 2024, 2023 and 2022 security amounts were based on the annual cost of providing health care benefits and included a reduction in the number of eligible employees.

Investment Plan

The Company has an investment plan, the CONSOL Energy Inc. Investment Plan (the "401(k) Plan"), available to most non-represented employees. The 401(k) Plan includes company matching of up to 6% of eligible compensation contributed by eligible Company employees. Total company matching contributions were \$13,179, \$12,348 and \$10,216 for the years ended December 31, 2024, 2023 and 2022, respectively.

The Company may also make discretionary contributions to the 401(k) Plan ranging from 1% to 6% of eligible compensation for eligible employees (as defined by the 401(k) Plan). Discretionary contributions of \$10,517 were accrued for at December 31, 2022 and were paid into employees' accounts in 2023. There were no such discretionary contributions accrued for at December 31, 2024 and 2023.

Long-Term Disability

The Company has a Long-Term Disability Plan available to all eligible full-time salaried employees. The benefits for this plan are based on a percentage of monthly earnings, offset by all other income benefits available to the disabled.

	For the Years Ended December 31,		
	2024	2023	2022
Net periodic benefit costs	\$ 869	\$ 534	\$ 546
Discount rate assumption used to determine net periodic benefit costs	5.03 %	5.34 %	2.39 %

Liabilities incurred under the Long-Term Disability Plan are included in Other Accrued Liabilities and Other Noncurrent Liabilities in the Consolidated Balance Sheets and amounted to a combined total of \$5,954 and \$6,803 at December 31, 2024 and 2023, respectively.

NOTE 18—STOCK-BASED COMPENSATION:

The Company adopted the CONSOL Energy Inc. Omnibus Performance Incentive Plan (as amended from time to time, the "Performance Incentive Plan") on November 22, 2017. The Performance Incentive Plan provides for grants of stock-based awards to employees, including any officer or employee-director of the Company, who is not a member of the Compensation Committee. These awards are intended to compensate the recipients thereof based on the performance of the Company's stock and the recipients' continued services during the vesting period, as well as align the recipients' long-term interests with those of the Company's shareholders. The Company is responsible for the cost of awards granted under the Performance Incentive Plan, and all determinations with respect to awards to be made under the Performance Incentive Plan will be made by the board of directors or a committee as delegated by the board of directors.

The Performance Incentive Plan limits the number of units that may be delivered pursuant to vested awards to 2,600,000 shares, subject to proportionate adjustment in the event of stock splits, stock dividends, recapitalizations, and other similar transactions or events. Shares subject to awards that are canceled, forfeited, withheld to satisfy exercise prices or tax withholding obligations or otherwise terminate without delivery will be available for delivery pursuant to other awards.

For only those shares expected to vest, the Company recognizes stock-based compensation costs on a straight-line basis over the requisite service period of the award as specified in the award agreement, which is generally the vesting term. The vesting of all awards will accelerate in the event of death and disability and may accelerate upon a change in control of the Company. Some awards may accelerate based on retirement age. The Company accounts for forfeitures of stock-based compensation as they occur. The total stock-based compensation expense recognized during the years ended December 31, 2024, 2023 and 2022 was \$11,350, \$10,046, and \$7,890, respectively, and was included in General and Administrative Costs on the Consolidated Statements of Income. This includes expense specifically related to the Performance Incentive Plan. The related deferred tax benefit totaled \$2,539, \$2,244 and \$1,842 for the years ended December 31, 2024, 2023 and 2022, respectively.

As of December 31, 2024, the Company has \$8,198 of unrecognized compensation cost related to all nonvested stock-based compensation awards, which is expected to be recognized over a weighted-average period of 1.72 years. The vesting of all nonvested stock-based compensation awards was accelerated in accordance with the terms of the Merger Agreement at the effective time of the closing of the Merger. When restricted stock and performance share unit awards become vested, the issuances are made from the Company's common stock shares.

Restricted Stock Units

The Company grants certain employees and non-employee directors restricted stock units, which entitle the holder to shares of common stock as the award vests. Compensation expense is recognized on a straight-line basis over the requisite service period of the award. The total fair value of restricted stock units vested during the years ended December 31, 2024, 2023 and 2022 was \$17,710, \$8,359 and \$5,420, respectively. The following table represents the nonvested restricted stock units and their corresponding fair value (based upon the closing share price) at the date of grant:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2023	550,211	\$ 36.96
Granted	134,682	\$ 86.70
Vested	(303,936)	\$ 35.52
Forfeited	(7,493)	\$ 68.49
Nonvested at December 31, 2024	<u>373,464</u>	<u>\$ 55.43</u>

Performance Share Units

The Company grants certain employees performance share unit awards, which entitle the holder to shares of common stock subject to the achievement of certain market and performance goals. Compensation expense is recognized over the service period of awards and adjusted for the probability of achievement of performance-based goals. The total fair value of performance share units vested during the years ended December 31, 2024, 2023 and 2022 was \$1,090, \$1,161 and \$1,943, respectively. The following table represents the nonvested performance share units and their corresponding fair value (based upon the closing share price and/or Monte Carlo simulation) on the date of grant:

	Number of Shares	Weighted Average Grant Date Fair Value
Nonvested at December 31, 2023	39,412	\$ 62.45
Granted	35,652	\$ 83.77
Vested	(17,450)	\$ 62.45
Forfeited	—	\$ —
Nonvested at December 31, 2024	<u>57,614</u>	<u>\$ 75.64</u>

NOTE 19—SUPPLEMENTAL CASH FLOW INFORMATION:

The following are non-cash transactions that impact the investing and financing activities of the Company.

The Company entered into non-cash finance lease arrangements of \$20,835, \$1,842 and \$24,844 during the years ended December 31, 2024, 2023 and 2022, respectively.

As of December 31, 2024, 2023 and 2022, the Company purchased goods and services related to capital projects in the amount of \$14,690, \$9,833 and \$6,381, respectively, which are included in Accounts Payable, Other Accrued Liabilities and Other Noncurrent Liabilities on the Consolidated Balance Sheets.

The following table shows cash paid for interest and income taxes for the periods indicated.

	For the Years Ended December 31,		
	2024	2023	2022
Cash Paid For:			
Interest (net of amounts capitalized)	\$ 23,790	\$ 29,251	\$ 50,844
Income taxes (net of refunds received)	\$ 39,250	\$ 111,304	\$ 55,753

NOTE 20—CONCENTRATION OF CREDIT RISK AND MAJOR CUSTOMERS:

The Company has contractual relationships with certain coal exporters who distribute coal to international markets. For the years ended December 31, 2024, 2023 and 2022, approximately 60%, 66% and 53%, respectively, of the Company's coal revenues were derived from these exporters and other foreign customers. The Company uses the end usage point as the basis for attributing tons to individual countries. Because title to the Company's export shipments typically transfers to customers at a point that does not necessarily reflect the end usage point, the Company attributes export tons to the country with the end usage point, if known. India and China were each attributed greater than 10% of total revenue during the year ended December 31, 2024. India was attributed greater than 10% of total revenue during the year ended December 31, 2023. India and Europe were each attributed greater than 10% of total revenue during the year ended December 31, 2022. The Company also markets its thermal coal to electric power producers in the eastern United States. Coal revenues generated from electric power producers and other customers in the eastern United States were 40%, 34% and 47% for the years ended December 31, 2024, 2023 and 2022, respectively.

During the years ended December 31, 2024, 2023 and 2022, two customers each comprised over 10% of the Company's total sales, aggregating approximately 22%, 23% and 30%, respectively, of the Company's total sales. Additionally, two of the Company's customers each had outstanding balances in excess of 10% of the total trade receivable balance as of December 31, 2024. Three of the Company's customers had outstanding balances in excess of 10% of the total trade receivable balance as of December 31, 2023.

Concentration of credit risk is summarized below:

	December 31,	
	2024	2023
Electric coal utilities	\$ 30,162	\$ 28,870
Coal exporters and industrial customers	69,630	85,080
Steel and coke producers	33,126	29,340
Other	5,097	4,788
Total Trade Receivables	138,015	148,078
Less: Allowance for credit losses	(1,265)	(466)
Total Trade Receivables, net	\$ 136,750	\$ 147,612

NOTE 21—DERIVATIVES:

Coal Price Risk Management Positions

The Company may sell or purchase forward contracts, swaps and options in the over-the-counter coal market in order to manage its exposure to coal prices. The Company has exposure to the risk of fluctuating coal prices related to forecasted or index-priced sales of coal or to the risk of changes in the fair value of a fixed price physical sales contract. All of the Company's coal-related derivative contracts were settled as of December 31, 2022.

Derivatives Disclosures

The Company had master netting agreements with all of its counterparties which allowed for the settlement of contracts in an asset position with contracts in a liability position in the event of default or termination. Such netting arrangements reduced the Company's credit exposure related to these counterparties to the extent the Company had any liability to such counterparties. For classification purposes, the Company recorded the net fair value of all the positions with a given counterparty as a net asset or liability in the Consolidated Balance Sheets.

The Company did not seek cash flow hedge accounting treatment for its commodity derivative financial instruments and therefore, changes in fair value were reflected in earnings throughout the terms of those instruments. During the year ended December 31, 2022, the Company settled its commodity derivatives at a loss of \$289,228. Additionally, during the year ended December 31, 2022, the Company recognized an adjustment to the fair value of its commodity derivatives of (\$52,204). This settlement and fair value adjustment were included in Loss on Commodity Derivatives, net on the accompanying Consolidated Statements of Income.

The Company classified the cash effects of its derivatives within the Cash Flows from Operating Activities section of the Consolidated Statements of Cash Flows.

NOTE 22—FAIR VALUE OF FINANCIAL INSTRUMENTS:

The Company determines the fair value of assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. The fair values are based on assumptions that market participants would use when pricing an asset or liability, including assumptions about risk and the risks inherent in valuation techniques and the inputs to valuations. The fair value hierarchy is based on whether the inputs to valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources (including SOFR-based discount rates and U.S. Treasury-based rates), while unobservable inputs reflect the Company's own assumptions of what market participants would use.

The fair value hierarchy includes three levels of inputs that may be used to measure fair value as described below.

Level One - Quoted prices for identical instruments in active markets. The Company's Level 1 assets include marketable securities.

Level Two - The fair value of the assets and liabilities included in Level 2 are based on standard industry income approach models that use significant observable inputs, including SOFR-based discount rates and U.S. Treasury-based rates.

Level Three - Unobservable inputs significant to the fair value measurement supported by little or no market activity.

In those cases when the inputs used to measure fair value meet the definition of more than one level of the fair value hierarchy, the lowest level input that is significant to the fair value measurement in its totality determines the applicable level in the fair value hierarchy.

The financial instruments measured at fair value on a recurring basis are summarized below:

Description	Fair Value Measurements at December 31, 2024			Fair Value Measurements at December 31, 2023		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
U.S Treasury Securities	\$ 51,993	\$ —	\$ —	\$ 81,932	\$ —	\$ —
Global Water Treatment Trust Fund	\$ 12,054	\$ —	\$ —	\$ —	\$ —	\$ —

The following methods and assumptions were used to estimate the fair value for which the fair value option was not elected:

Long-term debt: The fair value of long-term debt is measured using unadjusted quoted market prices or estimated using discounted cash flow analyses. The discounted cash flow analyses are based on current market rates for instruments with similar cash flows.

The carrying amounts and fair values of financial instruments for which the fair value option was not elected are as follows:

	December 31, 2024		December 31, 2023	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Long-Term Debt (Excluding Debt Issuance Costs)	\$ 184,677	\$ 199,052	\$ 185,206	\$ 199,591

Certain of the Company's debt is actively traded on a public market and, as a result, constitutes Level 1 fair value measurements. The portion of the Company's debt obligations that is not actively traded is valued through reference to the applicable underlying benchmark rate and, as a result, constitutes Level 2 fair value measurements.

NOTE 23—COMMITMENTS AND CONTINGENT LIABILITIES:

The Company is subject to various lawsuits and claims with respect to such matters as personal injury, wrongful death, damage to property, exposure to hazardous substances, governmental regulations including environmental remediation, employment and contract disputes and other claims and actions arising out of the normal course of business. The Company accrues the estimated loss for these lawsuits and claims when the loss is probable and reasonably estimable. The Company's estimated accruals related to pending claims not discussed below, individually and in the aggregate, are immaterial to the financial position, results of operations or cash flows of the Company as of December 31, 2024. It is possible that the aggregate loss in the future with respect to these lawsuits and claims could ultimately be material to the Company's financial position, results of operations or cash flows; however, such amounts cannot be reasonably estimated. The amount claimed against the Company as of December 31, 2024 is disclosed below when an amount is expressly stated in the lawsuit or claim, which is not often the case.

United Mine Workers of America 1992 Benefit Plan Litigation: In 2013, Murray Energy and its subsidiaries ("Murray") entered into a stock purchase agreement (the "Murray sale agreement") with the Company's former parent pursuant to which Murray acquired the stock of Consolidation Coal Company and certain subsidiaries and certain other assets and liabilities. At the time of sale, the liabilities included certain retiree medical liabilities under the Coal Industry Retiree Health Benefit Act of 1992 ("Coal Act") and certain federal black lung liabilities under the Black Lung Benefits Act ("BLBA"). Based upon information available, the Company estimates that the annual servicing costs of these liabilities are approximately \$10 million to \$20 million per year for the next ten years. The annual servicing cost would decline each year since the beneficiaries of the Coal Act consist principally of miners who retired prior to 1994. Murray filed for Chapter 11 bankruptcy in October 2019. As part of the bankruptcy proceedings, Murray unilaterally entered into a settlement with the United Mine Workers of America 1992 Benefit Plan (the "1992 Benefit Plan") to transfer retirees in the Murray Energy Section 9711 Plan to the 1992 Benefit Plan. This was approved by the bankruptcy court on April 30, 2020. On May 2, 2020, the 1992 Benefit Plan filed an action in the United States District Court for the District of Columbia asking the court to make a determination whether the Company's former parent or the Company has any continuing retiree medical liabilities under the Coal Act (the "1992 Plan Lawsuit"). The Murray sale agreement includes indemnification by Murray with respect to the Coal Act and BLBA liabilities. In addition, the Company had agreed to indemnify its former

parent relative to certain pre-separation liabilities. As of September 16, 2020, the Company entered into a settlement agreement with Murray and withdrew its claims in bankruptcy. On September 11, 2020, the Defendants in the 1992 Plan Lawsuit filed a Motion to Dismiss Plaintiffs' Second Amended Complaint which was denied by the Court on March 29, 2022. The Company will continue to vigorously defend any claims that attempt to transfer any of such liabilities directly or indirectly to the Company, including raising all applicable defenses against the 1992 Benefit Plan's suit. With respect to this lawsuit, while a loss is reasonably possible, it is not probable and, as a result, no accrual has been recorded.

United Mine Workers of America 1974 Pension Plan Litigation: On March 7, 2024, the Company's former parent filed a complaint (the "Indemnification Lawsuit") in the Superior Court of the State of Delaware against the Company that stated that the Company's former parent had settled potential claims asserted by the United Mine Workers of America 1974 Pension Plan ("1974 Plan") against the Company's former parent for a total settlement amount of \$75,000 to be paid over a five-year period, in exchange for a full release by the 1974 Plan of the Company's former parent, the Company and their affiliates. In the Indemnification Lawsuit, the Company's former parent is seeking (i) indemnification from the Company under the 2017 Separation and Distribution Agreement between the Company and its former parent for the \$75,000 settlement plus the Company's former parent's alleged legal expenses related to its settlement with the 1974 Plan, (ii) the costs and expenses the Company's former parent incurs in connection with the Indemnification Lawsuit, (iii) pre- and post-judgment interest, (iv) punitive damages and (v) any other relief the court deems just and proper. On May 9, 2024, the Company's former parent filed a Motion for Summary Judgment while the Company filed a brief in opposition of the motion on June 27, 2024, with briefing concluding on July 19, 2024. Oral arguments were held in the third quarter of 2024. On November 8, 2024, the Superior Court of the State of Delaware granted the Company's former parent's partial motion for summary judgment. In conjunction with this ruling, the Company established an accrual with respect to the Indemnification Lawsuit for \$67,933, which amount is equal to the net present value of the payments over a five-year period in its Consolidated Income Statements. As of December 31, 2024, this transaction resulted in \$10,000 of Other Accrued Liabilities and \$43,574 of Other Noncurrent Liabilities included in the Consolidated Balance Sheets.

The Company and various subsidiaries are defendants in certain other legal proceedings. In the opinion of management, based upon an investigation of these matters and discussion with legal counsel, the ultimate outcome of such other legal proceedings, individually and in the aggregate, is not expected to have a material adverse effect on the Company's financial position, results of operations or liquidity.

The following is a summary, as of December 31, 2024, of the financial guarantees, unconditional purchase obligations and letters of credit to certain third parties. Employee-related financial guarantees have primarily been provided to support the 1992 Benefit Plan and federal black lung and various state workers' compensation self-insurance programs. Environmental financial guarantees have primarily been provided to support various performance bonds related to reclamation and other environmental issues. Other financial guarantees have been extended to support sales contracts, insurance policies, surety indemnity agreements, legal matters, full and timely payments of mining equipment leases, and various other items necessary in the normal course of business. These amounts represent the maximum potential of total future payments that the Company could be required to make under these instruments. Certain letters of credit included in the table below were issued against other commitments included in this table. These amounts have not been reduced for potential recoveries under recourse or collateralization provisions. Generally, recoveries under reclamation bonds would be limited to the extent of the work performed at the time of the default. No amounts related to these commitments are recorded as liabilities in the financial statements. The Company's management believes that these commitments will not have a material adverse effect on the Company's financial condition.

Amount of Commitment Expiration per Period

	Total Amounts Committed	Less Than 1 Year	1-3 Years	3-5 Years	Beyond 5 Years
Letters of Credit:					
Employee-Related	\$ 47,430	\$ 27,190	\$ 20,240	\$ —	\$ —
Environmental	398	—	398	—	—
Other	131,181	26,935	104,246	—	—
Total Letters of Credit	\$ 179,009	\$ 54,125	\$ 124,884	\$ —	\$ —
Surety Bonds:					
Employee-Related	\$ 80,210	\$ 80,210	\$ —	\$ —	\$ —
Environmental	526,388	477,386	49,002	—	—
Other	4,421	4,421	—	—	—
Total Surety Bonds	\$ 611,019	\$ 562,017	\$ 49,002	\$ —	\$ —

The Company regularly evaluates the likelihood of default for all guarantees based on an expected loss analysis and records the fair value, if any, of its guarantees as an obligation in the Consolidated Financial Statements.

NOTE 24—SEGMENT INFORMATION:

The Company reports segment information based on the “management” approach. The management approach designates the internal reporting used by management to make decisions on and assess performance of the Company’s reportable segments. The Company presently consists of 2 reportable segments, the PAMC and the CONSOL Marine Terminal. The PAMC includes the Bailey Mine, the Enlow Fork Mine, the Harvey Mine and a centralized preparation plant. The PAMC segment’s principal activities include the mining, preparation and marketing of bituminous coal, sold primarily to industrial end-users, power generators and metallurgical end-users. The CONSOL Marine Terminal provides coal export terminal services through the Port of Baltimore. General and administrative costs are allocated to the Company’s segments based on a percentage of resources utilized, a percentage of total revenue and a percentage of total projected capital expenditures. The Company’s Other segment includes revenue and expenses from various corporate and diversified business activities that are not allocated to the PAMC or the CONSOL Marine Terminal segments. The diversified business activities currently include the Itmann Mining Complex, carbon products and materials businesses led by CONSOL Innovations LLC, the Greenfield Reserves and Resources, closed mine activities, other income, gain on asset sales related to non-core assets, and gain/loss on debt extinguishment. Additionally, interest expense and income taxes, as well as various other non-operated activities, none of which are individually significant to the Company, are also reflected in the Company’s Other segment and are not allocated to the PAMC and CONSOL Marine Terminal segments.

On January 1, 2024, the Company adopted ASU 2023-07 Segment Reporting (Topic 280). This ASU requires that a public business entity: (1) disclose, on an annual and interim basis, significant segment expenses that are regularly provided to the chief operating decision maker (“CODM”) and included within each reported measure of segment profit or loss; (2) disclose, on an annual and interim basis, an amount for other segment items (which is the difference between segment revenue less the segment expenses disclosed as significant and each reported measure of segment profit or loss) by reportable segment and a description of its composition; (3) may report one or more additional measures of segment profit or loss if the CODM uses more than one measure of a segment’s profit or loss in assessing segment performance and deciding how to allocate resources; and (4) disclose the title and position of the CODM and an explanation of how the CODM uses the reported measure(s) of segment profit or loss in assessing segment performance and deciding how to allocate resources. The prior period information included in the tables below has been recast to reflect the changes required by this ASU.

The Company’s CODM is the chief executive officer, who utilizes Adjusted EBITDA to monitor each segment. Adjusted EBITDA removes financial activity not related to ongoing operations, which allows for a review of more streamlined operating results. It is used by the CODM to review the budget versus actual results and to evaluate the operating performance of each segment. This review and evaluation is utilized by the CODM to determine the best allocation of resources across the segments and for other business purposes.

Reportable segment results for the year ended December 31, 2024 are:

	PAMC	CONSOL Marine Terminal	Other, Corporate and Eliminations	Consolidated
Total Revenue from Contracts with Customers	\$ 1,949,593	\$ 87,746	\$ 127,067	\$ 2,164,406
Cash Costs of Revenue	973,139	27,372	139,125	
Freight Expense	266,393	—	7,633	
Other Segment Items	61,049	2,977	31,230	(1)
Adjusted EBITDA	<u>\$ 649,012</u>	<u>\$ 57,397</u>	<u>\$ (50,921)</u>	<u>\$ 655,488</u>
Segment Assets	<u>\$ 1,739,792</u>	<u>\$ 88,146</u>	<u>\$ 1,051,605</u>	<u>\$ 2,879,543</u>
Capital Expenditures	<u>\$ 149,021</u>	<u>\$ 8,350</u>	<u>\$ 20,617</u>	<u>\$ 177,988</u>

Reportable segment results for the year ended December 31, 2023 are:

	PAMC	CONSOL Marine Terminal	Other, Corporate and Eliminations	Consolidated
Total Revenue from Contracts with Customers	\$ 2,302,958	\$ 106,166	\$ 97,511	\$ 2,506,635
Cash Costs of Revenue	939,892	27,259	98,803	
Freight Expense	278,348	—	15,755	
Other Segment Items	65,557	(1,415)	34,748	(1)
Adjusted EBITDA	<u>\$ 1,019,161</u>	<u>\$ 80,322</u>	<u>\$ (51,795)</u>	<u>\$ 1,047,688</u>
Segment Assets	<u>\$ 1,582,434</u>	<u>\$ 83,322</u>	<u>\$ 1,009,247</u>	<u>\$ 2,675,003</u>
Capital Expenditures	<u>\$ 144,550</u>	<u>\$ 4,568</u>	<u>\$ 18,673</u>	<u>\$ 167,791</u>

Reportable segment results for the year ended December 31, 2022 are:

	PAMC	CONSOL Marine Terminal	Other, Corporate and Eliminations	Consolidated
Total Revenue from Contracts with Customers	\$ 2,151,494	\$ 78,915	\$ 49,609	\$ 2,280,018
Settlements of Commodity Derivatives	289,228	—	—	
Cash Costs of Revenue	834,405	24,758	41,807	
Freight Expense	177,610	—	4,831	
Other Segment Items	77,156	1,898	21,592	(1)
Adjusted EBITDA	<u>\$ 773,095</u>	<u>\$ 52,259</u>	<u>\$ (18,621)</u>	<u>\$ 806,733</u>
Segment Assets	<u>\$ 1,756,368</u>	<u>\$ 82,333</u>	<u>\$ 865,676</u>	<u>\$ 2,704,377</u>
Capital Expenditures	<u>\$ 107,401</u>	<u>\$ 4,646</u>	<u>\$ 59,459</u>	<u>\$ 171,506</u>

(1) Other segment items include other non-operating income, general and administrative costs, and other non-operating expenses that are not part of each segment's ongoing operations.

For the years ended December 31, 2024, 2023 and 2022, the Company's reportable segments had revenues from the following customers, each comprising over 10% of the Company's total sales:

	For the Years Ended December 31,		
	2024	2023	2022
Customer A	\$ 240,990	\$ 283,115	*
Customer B	\$ 220,537	\$ 286,041	*
Customer C	*	*	\$ 368,502
Customer D	*	*	\$ 328,994

* Revenues from these customers during the periods presented were less than 10% of the Company's total sales.

Reconciliation of Segment Information to Consolidated Amounts:

Revenue and Other Income:

	For the Years Ended December 31,		
	2024	2023	2022
Total Segment Revenue from Contracts with Customers	\$ 2,164,406	\$ 2,506,635	\$ 2,280,018
Loss on Commodity Derivatives, net	—	—	(237,024)
Other Income not Allocated to Segments	64,964	53,261	24,354
Gain on Sale of Assets	6,941	8,981	34,589
Total Consolidated Revenue and Other Income	\$ 2,236,311	\$ 2,568,877	\$ 2,101,937

Adjusted EBITDA:

	For the Year Ended December 31, 2024			
	PAMC	CONSOL Marine Terminal	Other	Consolidated
Pretax Income (Loss)	\$ 463,283	\$ 45,568	\$ (178,204)	\$ 330,647
Interest Expense	—	6,071	16,121	22,192
Interest Income	(6,334)	—	(12,889)	(19,223)
Depreciation, Depletion and Amortization	182,876	5,237	35,413	223,526
Stock-Based Compensation	9,187	521	1,642	11,350
Merger-Related Expenses	—	—	19,280	19,280
1974 UMWA Pension Plan Litigation	—	—	67,933	67,933
Non-Qualified Pension Plan Curtailment Gain	—	—	(217)	(217)
Adjusted EBITDA	\$ 649,012	\$ 57,397	\$ (50,921)	\$ 655,488

	For the Year Ended December 31, 2023			
	PAMC	CONSOL Marine		Consolidated
		Terminal	Other	
Pretax Income (Loss)	\$ 810,234	\$ 69,253	\$ (101,615)	\$ 777,872
Interest Expense	—	6,097	23,228	29,325
Interest Income	(2,344)	—	(11,253)	(13,597)
Depreciation, Depletion and Amortization	202,833	4,671	33,813	241,317
Stock-Based Compensation	8,438	301	1,307	10,046
Loss on Debt Extinguishment	—	—	2,725	2,725
Adjusted EBITDA	<u>\$ 1,019,161</u>	<u>\$ 80,322</u>	<u>\$ (51,795)</u>	<u>\$ 1,047,688</u>
	For the Year Ended December 31, 2022			
	PAMC	CONSOL Marine		Consolidated
		Terminal	Other	
Pretax Income (Loss)	\$ 620,208	\$ 41,223	\$ (92,994)	\$ 568,437
Interest Expense	—	6,116	46,524	52,640
Interest Income	(1,857)	—	(4,174)	(6,031)
Depreciation, Depletion and Amortization	200,320	4,604	21,954	226,878
Stock-Based Compensation	6,628	316	946	7,890
Loss on Debt Extinguishment	—	—	5,623	5,623
Equity Affiliate Adjustments	—	—	3,500	3,500
Fair Value Adjustment of Commodity Derivative Instruments	(52,204)	—	—	(52,204)
Adjusted EBITDA	<u>\$ 773,095</u>	<u>\$ 52,259</u>	<u>\$ (18,621)</u>	<u>\$ 806,733</u>

Enterprise-Wide Disclosures:

For the year ended December 31, 2024, India and the United States of America were each attributed greater than 30% of total revenue, and China was attributed greater than 10% of total revenue. For the year ended December 31, 2023, India and the United States of America were each attributed greater than 30% of total revenue. For the year ended December 31, 2022, more than 40% of the Company's revenue was attributable to customers based in the United States of America. India and Europe were each attributed greater than 10% of total revenue during the year ended December 31, 2022.

The Company's property, plant and equipment is predominantly located in the United States. At December 31, 2024 and 2023, less than 1% of the Company's net property, plant and equipment was located in Canada.

NOTE 25—SUBSEQUENT EVENTS:

On January 14, 2025, Core Natural Resources, Inc. (formerly known as CONSOL Energy Inc.), a Delaware corporation, completed its previously announced merger of equals transaction with Arch Resources, Inc., a Delaware corporation (“Arch”), pursuant to that certain Agreement and Plan of Merger, dated as of August 20, 2024 (the “Merger Agreement”), by and among the Company, Mountain Range Merger Sub Inc., a Delaware corporation and wholly-owned subsidiary of the Company (“Merger Sub”), and Arch. Pursuant to the terms of the Merger Agreement, Merger Sub merged with and into Arch (the “Merger”), with Arch continuing as the surviving corporation and as a wholly-owned subsidiary of the Company. In connection with the Merger, we issued 24.3 million shares of Company common stock, which represents approximately 45% of the issued and outstanding shares of Company common stock after giving effect to such issuance.

The Merger joins two proven leadership teams and operating platforms to establish a premier North American coal producer and exporter of high-quality, low-cost coals with offerings ranging from metallurgical to high calorific value thermal coals. With mining operations and terminal facilities across six states, the combined company owns 11 mines, including one of the largest, lowest cost and highest calorific value thermal coal mining complexes in North America and one of the largest, lowest cost and highest quality metallurgical coal mine portfolios in the United States. The combined company also has access to global markets via ownership interests in two export terminals on the U.S. Eastern seaboard, along with strategic connectivity to ports on the West Coast and Gulf of Mexico. The combined company expects to realize meaningful operating synergies through the optimization of support functions, greatly enhanced marketing opportunities and a significantly expanded logistics network, which will enhance the Company's ability to deliver coal reliably and efficiently to its global customers.

The accounting for the Merger is incomplete as of the filing date of this Annual Report on Form 10-K due to the limited time since the closing date. The Company will provide additional disclosures in future filings.

In connection with the Merger, on January 13, 2025, the Company purchased an aggregate principal amount of \$98,075 of the outstanding (i) Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2020, and (ii) Solid Waste Disposal Facility Revenue Bonds (Arch Resources Project), Series 2021 (together, the “Arch Bonds”), which were issued by the West Virginia Economic Development Authority for the benefit of Arch. The Company also consented to the release of all liens, mortgages and security interests granted or purported to be granted pursuant to the security documents relating to the Arch Bonds and to the termination of all such security documents. The \$98,075 of Arch Bonds purchased by the Company on January 13, 2025 constitute all of the outstanding Arch Bonds.

On January 14, 2025, and in connection with the Merger, the Company entered into an amendment to its existing Revolving Credit Facility. The amendment increases the available revolving commitments from \$355 million to \$600 million and extends the maturity date of the Revolving Credit Facility to April 30, 2029. The Revolving Credit Facility now includes participation from 22 banks, including nine new lenders, and 37% of the total commitments come from new lenders, while 63% are from existing lenders. Additionally, the Company reduced the annual interest rate by 75 bps while further enhancing financial flexibility.

On February 18, 2025, the Company's Board of Directors approved a new capital return framework that involves a mix of dividends and share repurchases. The repurchase program permits the repurchase, from time to time, of the Company's outstanding shares of common stock in an aggregate amount of up to \$1 billion, subject to certain limitations in the Company's debt agreements.

On February 20, 2025, the Company announced a \$0.10/share dividend in an aggregate amount of approximately \$5.4 million, payable on March 17, 2025 to all stockholders of record as of March 3, 2025.

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure controls and procedures. The Company, under the supervision and with the participation of its management, including the Company's principal executive officer and principal financial officer, evaluated the effectiveness of the Company's "disclosure controls and procedures," as such term is defined in Rule 13a-15(e) under the Exchange Act, as of the end of the period covered by this Annual Report on Form 10-K. Based on that evaluation, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures are effective as of December 31, 2024 to ensure that information required to be disclosed by the Company in reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms, and includes controls and procedures designed to ensure that information required to be disclosed by the Company in such reports is accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer, as appropriate to allow timely decisions regarding required disclosure.

Management's Annual Report on Internal Control Over Financial Reporting. The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting. The Company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Accordingly, even effective controls can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Management assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2024. In making this assessment, management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (COSO) in Internal Control-Integrated Framework. Based on our assessment and those criteria, management has concluded that the Company maintained effective internal control over financial reporting as of December 31, 2024.

Ernst & Young LLP, our independent registered public accounting firm that has audited the financial statements contained in this annual report on Form 10-K, has issued an attestation report on the Company's internal control over financial reporting, which is on page 125 of this annual report on Form 10-K.

Changes in internal controls over financial reporting. There was no change in the Company's internal controls over financial reporting, as such term is defined in Rule 13a-15(f) of the Exchange Act, that materially affected, or is reasonably likely to materially affect, the Company's internal controls over financial reporting.

It should be noted that any system of controls, however well designed and operated, can provide only reasonable, and not absolute, assurance that the objectives of the system will be met. In addition, the design of any control system is based in part upon certain assumptions about the likelihood of future events.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Core Natural Resources, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited Core Natural Resources, Inc.'s internal control over financial reporting as of December 31, 2024, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Core Natural Resources, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2024, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2024 and 2023, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2024, and the related notes and our report dated February 20, 2025 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ Ernst & Young LLP

Pittsburgh, Pennsylvania

February 20, 2025

ITEM 9B. OTHER INFORMATION

Rule 10b5-1 Trading Plans

Our executive officers and directors may from time to time enter into plans or arrangements for the purchase or sale of our Common Stock that are intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) under the Exchange Act. During the three months ended December 31, 2024, no director or officer of the Company adopted or terminated a “Rule 10b5-1 trading arrangement” or “non-Rule 10b5-1 trading arrangement,” as each term is defined in Item 408(a) of Regulation S-K.

Mine Safety - Reporting of Combustion-Related Activity at Underground Mine

On January 13, 2025, isolated combustion-related activity was reported at the Leer South mine, located in Barbour County, West Virginia. The Company temporarily sealed the Leer South mine's active longwall panel in order to extinguish isolated combustion-related activity there. The Company resumed development work with continuous miners in February 2025, and, based on collaborative, ongoing discussions with regulatory authorities, currently expects to resume longwall mining in mid-2025. The re-entry process will be multi-phased, beginning with the construction of ventilation controls followed by the resumption of continuous miner development.

Amendment to the Performance Incentive Plan

On February 18, 2025, the Performance Incentive Plan was amended to change the name of the plan to the Core Natural Resources, Inc. Equity Plan and to assume the shares of Arch common stock, par value \$0.01, that were available for grant under the Arch Resources, Inc. 2016 Omnibus Incentive Plan, as amended from time to time, immediately prior to the consummation of the Merger (such shares, after appropriate adjustment to reflect the Merger, the “Remaining Arch Plan Shares”) so that the Remaining Arch Plan Shares are available for issuance under the Performance Incentive Plan in accordance with, and subject to the terms and conditions of, the New York Stock Exchange Listed Company Manual (including Rule 303A.08 thereof).

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item is incorporated by reference from the information under the captions “Proposal No. 1 - Election of Directors,” “Executive Officers,” “Beneficial Ownership of Securities” and “Board of Directors and Compensation Information - Board of Directors and its Committees” in the Company's Proxy Statement on Schedule 14A for its 2025 Annual Meeting of Stockholders (the “Proxy Statement”).

Code of Ethics

The Company has a written Code of Business Conduct and Ethics that applies to the Company's Chief Executive Officer (Principal Executive Officer), Chief Financial Officer and President (Principal Financial Officer), Chief Accounting Officer (Principal Accounting Officer) and others. The Code of Business Conduct and Ethics is available on the Company's website at www.corenaturalresources.com. Any amendments to, or waivers from, a provision of our Code of Business Conduct and Ethics that applies to our principal executive officer, principal financial officer and principal accounting officer and that relates to any element of the code of ethics enumerated in paragraph (b) of Item 406 of Regulation S-K shall be disclosed by posting such information on our website at www.corenaturalresources.com.

Insider Trading Policies and Procedures

The Company has adopted an Insider Trading Compliance Policy governing the purchase, sale and/or other disposition of our securities by the Company's directors, officers and employees, entities controlled by the Company's directors, officers and employees, and contractors, consultants and other persons designated by the Company, which we believe is reasonably designed to promote compliance with insider trading laws, rules and regulations and applicable listing standards. A copy of our Insider Trading Compliance Policy is filed with this Annual Report on Form 10-K as Exhibit 19.

ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the information under the captions “Board of Directors and Compensation Information - Director Compensation Table - 2024,” “Board of Directors and Compensation Information - Understanding Our Director Compensation Table” and “Executive Compensation Information” in the Proxy Statement.

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

The information required by this Item is incorporated by reference from the information under the captions “Beneficial Ownership of Securities” and “Securities Authorized for Issuance Under the CONSOL Energy Inc. Equity Compensation Plan” in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by this Item is incorporated by reference from the information under the captions “Related Person Transaction Policy and Procedures and Related Person Transactions” and “Board of Directors and Compensation Information - Board of Directors and its Committees - Determination of Director Independence” in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this Item is incorporated by reference from the information under the caption “Audit Committee and Audit Fees - Independent Registered Public Accounting Firm” in the Proxy Statement.

PART IV

ITEM 15. EXHIBIT INDEX

In reviewing any agreements incorporated by reference in this Form 10-K or filed with this Form 10-K, please remember that such agreements are included to provide information regarding their terms. They are not intended to be a source of financial, business or operational information about the Company or any of its subsidiaries or affiliates. The representations, warranties and covenants contained in these agreements are made solely for purposes of the agreements and are made as of specific dates; are solely for the benefit of the parties; may be subject to qualifications and limitations agreed upon by the parties in connection with negotiating the terms of the agreements, including being made for the purpose of allocating contractual risk between the parties instead of establishing matters as facts; and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors or security holders. Investors and security holders should not rely on the representations, warranties and covenants or any description thereof as characterizations of the actual state of facts or condition of the Company or any of its subsidiaries or affiliates or, in connection with acquisition agreements, of the assets to be acquired. Moreover, information concerning the subject matter of the representations, warranties and covenants may change after the date of the agreements. Accordingly, these representations and warranties alone may not describe the actual state of affairs as of the date they were made or at another time.

The following documents are filed as part of this report:

Financial Statements:

Report of Independent Registered Public Accounting Firm
Consolidated Statements of Income for the Years Ended December 31, 2024, 2023 and 2022
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2024, 2023 and 2022
Consolidated Balance Sheets at December 31, 2024 and 2023
Consolidated Statements of Stockholders' Equity for the Years Ended December 31, 2024, 2023 and 2022
Consolidated Statements of Cash Flows for the Years Ended December 31, 2024, 2023 and 2022
Notes to the Audited Consolidated Financial Statements

Schedules:

None

Index to Exhibits

Exhibits	Description	Method of Filing
2.1	Separation and Distribution Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 2.1 to Form 8-K (File No. 001-38147) filed on December 4, 2017
2.2	Tax Matters Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 2.2 to Form 8-K (File No. 001-38147) filed on December 4, 2017
2.3	Employee Matters Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 2.3 to Form 8-K (File No. 001-38147) filed on December 4, 2017
2.4	Intellectual Property Matters Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 2.4 to Form 8-K (File No. 001-38147) filed on December 4, 2017
2.5***	Agreement and Plan of Merger, dated as of October 22, 2020, by and among CONSOL Energy Inc., Transformer LP Holdings Inc., Transformer Merger Sub LLC, CONSOL Coal Resources LP and CONSOL Coal Resources GP LLC	Filed as Exhibit 2.1 to Form 8-K (File No. 001-38147) filed on October 23, 2020
2.6	Agreement and Plan of Merger, dated August 20, 2024, among CONSOL Energy Inc., Mountain Range Merger Sub Inc. and Arch Resources, Inc.#	Filed as Exhibit 2.1 to Form 8-K (File No. 001-38147) filed on August 21, 2024
2.7	Debtors' Fourth Amended Joint Plan of Reorganization Under Chapter 11 of the Bankruptcy Code	Filed as Exhibit 2.1 to Arch Resources' Form 8-K (File No. 001-13105) filed on September 15, 2016
2.8	Order Confirming Debtors' Fourth Amended Joint Plan of Reorganization Under Chapter 11 of the Bankruptcy Code on September 13, 2016	Filed as Exhibit 2.2 to Arch Resources' Form 8-K (File No. 001-13105) filed on September 15, 2016
3.1	Amended and Restated Certificate of Incorporation of the Company	Filed as Exhibit 3.1 to Form 8-K (File No. 001-38147) filed on December 4, 2017
3.2	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company	Filed as Exhibit 3.1 to Form 8-K (File No. 001-38147) filed on May 8, 2020
3.3	Second Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company	Filed as Exhibit 3.1 to Form 8-K (File No. 001-38147) filed on May 6, 2024
3.4	Certificate of Amendment to Amended and Restated Certificate of Incorporation of the Company	Filed as Exhibit 3.1 to Form 8-K (File No. 001-38147) filed on January 15, 2025
3.5	Fourth Amended and Restated Bylaws of the Company	Filed as Exhibit 3.2 to Form 8-K (File No. 001-38147) filed on January 15, 2025
4.1	Indenture dated as of November 13, 2017 by and between CONSOL Energy Inc. (formerly known as CONSOL Mining Corporation) and UMB Bank, N.A., as Trustee and Collateral Trustee (including form of supplemental indenture on subsidiary guarantors).	Filed as Exhibit 4.1 to Form 8-K (File No. 001-38147) filed on November 15, 2017
4.2	Description of Capital Stock	Filed herewith
4.3	Indenture, dated as of April 1, 2021, among CONSOL Energy Inc., the subsidiary guarantors party thereto and Wilmington Trust, N.A., as trustee	Filed as Exhibit 4.1 to Form 8-K (File No. 001-38147) filed on April 19, 2021

4.4	Loan Agreement, dated as of April 1, 2021, between the Pennsylvania Economic Development Financing Authority and the Company	Filed as Exhibit 4.2 to Form 8-K (File No. 001-38147) filed on April 19, 2021
4.5	Guaranty Agreement, dated as of April 1, 2021, among the subsidiary guarantors of CONSOL Energy Inc. and Wilmington Trust, N.A., as trustee	Filed as Exhibit 4.3 to Form 8-K (File No. 001-38147) filed on April 19, 2021
10.1	Transition Services Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.2	CNX Resources Corporation to CONSOL Energy Inc. Trademark License Agreement dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 10.2 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.3	CONSOL Energy Inc. to CNX Resources Corporation Trademark License Agreement, dated as of November 28, 2017, by and between the Company and CNX	Filed as Exhibit 10.3 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.4	First Amendment to Contract Agency Agreement, dated as of November 28, 2017, by and among CONSOL Energy Sales Company, CONSOL Thermal Holdings LLC (formerly known as CNX Thermal Holdings LLC) and the other parties thereto	Filed as Exhibit 10.5 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.5	First Amendment to Water Supply and Services Agreement, dated as of November 28, 2017 by and between CNX Water Assets LLC and CONSOL Thermal Holdings LLC (formerly known as CNX Thermal Holdings LLC)	Filed as Exhibit 10.6 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.6	Second Amendment to the Pennsylvania Mine Complex Operating Agreement, dated as of November 28, 2017, by and among CONSOL Pennsylvania Coal Company LLC, Conrhein Coal Company, CONSOL Thermal Holdings LLC and CONSOL Coal Resources LP	Filed as Exhibit 10.7 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.7	Credit Agreement, dated as of November 28, 2017, by and among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the other Secured Parties referred to therein#	Filed as Exhibit 10.8 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.8	Amendment No. 1, dated as of March 28, 2019, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on April 3, 2019
10.9	Amendment No. 2, dated as of June 5, 2020, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on June 11, 2020

10.10	Amendment No. 3, dated as of March 29, 2021, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on March 31, 2021
10.11	Amendment No. 4, dated as of July 18, 2022, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on July 25, 2022
10.12	Amendment No. 5, dated as of June 12, 2023, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on June 13, 2023
10.13	Amendment No. 6, dated as of January 14, 2025, to Credit Agreement, dated as of November 28, 2017, among the Company, the various financial institutions from time to time party thereto, PNC Bank, N.A., as administrative agent for the Revolving Lenders and Term A Lenders, Citibank, N.A., as administrative agent for the Term B Lenders and PNC Bank, N.A., as collateral agent for the Lenders and the Other Secured Parties referred to therein#	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on January 15, 2025
10.14	CONSOL Energy Inc. Omnibus Performance Incentive Plan*	Filed as Exhibit 4.3 to Form S-8 (File No. 333-221727) filed on November 22, 2017
10.15	Purchase and Sale Agreement, dated as of November 30, 2017, by and among CONSOL Marine Terminals LLC, CONSOL Pennsylvania Coal Company LLC and CONSOL Funding LLC	Filed as Exhibit 10.11 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.16	Sub-Originator Sale Agreement, dated as of November 30, 2017, by and between CONSOL Thermal Holdings LLC and CONSOL Pennsylvania Coal Company LLC	Filed as Exhibit 10.12 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.17	Receivables Financing Agreement, dated as of November 30, 2017, by and among CONSOL Funding LLC, CONSOL Pennsylvania Coal Company LLC, PNC Bank, N.A., PNC Capital Markets, LLC and certain lenders from time to time party thereto	Filed as Exhibit 10.13 to Form 8-K (File No. 001-38147) filed on December 4, 2017
10.18	First Amendment to Receivables Financing Agreement dated as of May 29, 2018	Filed as Exhibit 10.13 to Form 10-K (File No. 001-38147) filed on February 12, 2021
10.19	Second Amendment to Receivables Financing Agreement dated as of June 26, 2018	Filed as Exhibit 10.14 to Form 10-K (File No. 001-38147) filed on February 12, 2021
10.20	Third Amendment to Receivables Financing Agreement dated as of July 19, 2018	Filed as Exhibit 10.15 to Form 10-K (File No. 001-38147) filed on February 12, 2021

10.21	Fourth Amendment to Receivables Financing Agreement dated as of August 30, 2018	Filed as Exhibit 10.16 to Form 10-K (File No. 001-38147) filed on February 12, 2021
10.22	Fifth Amendment to Receivables Financing Agreement dated as of March 27, 2020**	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on May 11, 2020
10.23	Sixth Amendment to Receivables Financing Agreement dated as of June 22, 2022**	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on August 4, 2022
10.24	Seventh Amendment to Receivables Financing Agreement dated as of July 29, 2022**	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on August 4, 2022
10.25	Third Amended and Restated Receivables Purchase Agreement, dated October 5, 2016, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as initial servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.2 of Arch Resources' Form 8-K (File No. 001-13105) filed on October 11, 2016
10.26	First Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of April 27, 2017, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.2 of Arch Resources' Form 8-K (File No. 001-13105) filed on May 2, 2017
10.27	Second Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of August 27, 2018, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.7 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended September 30, 2018 filed on October 23, 2018
10.28	Third Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of May 14, 2019, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.9 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended June 30, 2019 filed on July 24, 2019
10.29	Fourth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of September 30, 2020, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.12 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended September 30, 2020 filed on October 23, 2020
10.30	Fifth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of December 4, 2020, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.13 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended March 31, 2021 filed on April 22, 2021
10.31	Sixth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of October 8, 2021, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.15 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended September 30, 2021 filed on October 26, 2021

10.32	Seventh Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of August 3, 2022, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.17 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended September 30, 2022 filed on October 27, 2022
10.33	Eighth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of February 8, 2024, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.17 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2023 filed on February 15, 2024
10.34	Ninth Amendment to Third Amended and Restated Receivables Purchase Agreement, dated as of January 15, 2025, among Arch Receivable Company, LLC, as seller, Arch Coal Sales Company, Inc., as servicer, PNC Bank, National Association as administrator and issuer of letters of credit thereunder and the other parties party thereto, as securitization purchasers	Filed as Exhibit 10.2 to Form 8-K (File No. 001-38147) filed on January 15, 2025
10.35	Second Amended and Restated Purchase and Sale Agreement among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.3 of Arch Resources' Form 8-K (File No. 001-13105) filed on October 11, 2016
10.36	First Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of December 21, 2016, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.7 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended September 30, 2017 filed on October 31, 2017
10.37	Second Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of April 27, 2017, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.3 of Arch Resources' Form 8-K (File No. 001-13105) filed on May 2, 2017
10.38	Third Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of September 14, 2017, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.16 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2020 filed on February 12, 2021
10.39	Fourth Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of December 13, 2019, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.17 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2020 filed on February 12, 2021
10.40	Fifth Amendment and Waiver to the Second Amended and Restated Purchase and Sale Agreement, dated as of June 17, 2020, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.18 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2020 filed on February 12, 2021
10.41	Sixth Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of December 31, 2020, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.19 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2020 filed on February 12, 2021
10.42	Seventh Amendment to the Second Amended and Restated Purchase and Sale Agreement, dated as of March 13, 2023, among Arch Resources, Inc. and certain subsidiaries of Arch Resources, Inc., as originators	Filed as Exhibit 10.25 of Arch Resources' Form 10-Q (File No. 001-13105) for the period ended March 31, 2023 filed on April 27, 2023

10.43	Second Amended and Restated Sale and Contribution Agreement between Arch Resources, Inc., as the transferor, and Arch Receivable Company, LLC	Filed as Exhibit 10.4 of Arch Resources' Form 8-K (File No. 001-13105) filed on October 11, 2016
10.44	First Amendment to the Second Amended and Restated Sale and Contribution Agreement, dated as of April 27, 2017, between Arch Resources, Inc., as the transferor, and Arch Receivable Company, LLC	Filed as Exhibit 10.4 of Arch Resources' Form 8-K (File No. 001-13105) filed on May 2, 2017
10.45	Second Amendment and Restatement of Master Cooperation and Safety Agreement by and among CONSOL Energy Inc., CNX Gas Company LLC, CNX Resources Holdings LLC and certain other parties thereto	Filed as Exhibit 10.5 to Form 10-12B/A (File No. 001-38147) filed on October 27, 2017
10.46	Coal Lease Agreement dated as of March 31, 1992, among Allegheny Land Company, as lessee, and UAC and Phoenix Coal Corporation, as lessors, and related guarantee	Filed by Ashland Coal, Inc. on Form 8-K on April 6, 1992
10.47	Federal Coal Lease dated as of January 24, 1996 between the U.S. Department of the Interior and the Thunder Basin Coal Company	Filed as Exhibit 10.20 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 1998 filed on March 2, 1999
10.48	Federal Coal Lease dated as of November 1, 1967 between the U.S. Department of the Interior and the Thunder Basin Coal Company	Filed as Exhibit 10.21 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 1998 filed on March 2, 1999
10.49	Federal Coal Lease effective as of June 9, 1995 between the U.S. Department of the Interior and Mountain Coal Company	Filed as Exhibit 10.22 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 1998 filed on March 2, 1999
10.50	Federal Coal Lease dated as of January 1, 1999 between the U.S. Department of the Interior and Ark Land Company	Filed as Exhibit 10.23 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 1998 filed on March 2, 1999
10.51	Federal Coal Lease effective as of March 1, 2005 by and between the United States of America and Arch Land LT, Inc. covering the tract of land known as "Little Thunder" in Campbell County, Wyoming	Filed as Exhibit 99.1 to Arch Resources' Form 8-K (File No. 001-13105) filed on February 10, 2005
10.52	Modified Coal Lease (WYW71692) executed January 1, 2003 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as "North Rochelle" in Campbell County, Wyoming	Filed as Exhibit 10.24 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2004 filed on March 11, 2005
10.53	Coal Lease (WYW127221) executed January 1, 1998 by and between the United States of America, through the Bureau of Land Management, as lessor, and Triton Coal Company, LLC, as lessee, covering a tract of land known as "North Roundup" in Campbell County, Wyoming	Filed as Exhibit 10.25 to Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2004 filed on March 11, 2005
10.54	CONSOL Energy Inc. Deferred Compensation Plan for Non-Employee Directors*	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on November 1, 2018
10.55	Employment Agreement of James A. Brock*	Filed as Exhibit 10.1 to Form 10-Q (File No. 001-38147) filed on May 3, 2018

10.56	Change in Control Severance Agreement for Martha A. Wiegand*	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.57	Change in Control Severance Agreement for Kurt Salvatori*	Filed as Exhibit 10.5 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.58	Change in Control Severance Agreement for John Rothka*	Filed as Exhibit 10.6 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.59	Form of Employment Agreement for Executive Officers of Arch Resources, Inc. and assumed by Core Natural Resources, Inc.*	Filed as Exhibit 10.4 of Arch Resources' Form 10-K (File No. 001-13105) for the year ended December 31, 2011 filed on February 29, 2012
10.60	Form Notice of Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.7 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.61	Form Notice of Performance-based Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.8 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.62	Form Notice of Restricted Stock Unit Award and Terms and Conditions for Spin Recognition (Non-Employee Director)*	Filed as Exhibit 10.9 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.63	Form Notice of Restricted Stock Unit Award and Terms and Conditions for Spin Recognition*	Filed as Exhibit 10.10 to Form 10-Q (File No. 001-38147) filed on May 3, 2018
10.64	Form Notice of Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on May 8, 2019
10.65	Form Notice of Performance-based Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.5 to Form 10-Q (File No. 001-38147) filed on May 8, 2019
10.66	Change in Control Severance Agreement for Mitesh Thakkar*	Filed as Exhibit 10.30 to Form 10-K (File No. 001-38147) filed on February 11, 2022
10.67	Form of Notice of Restricted Stock Unit Award Terms and Conditions*	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on May 11, 2020
10.68	Form of Notice of Performance-Based Restricted Stock Unit Award Terms and Conditions for James A. Brock*#	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on May 11, 2020
10.69	Form of Notice of Performance-Based Cash Award*#	Filed as Exhibit 10.5 to Form 10-Q (File No. 001-38147) filed on May 11, 2020
10.70	CONSOL Energy Inc. 2020 Amended and Restated Omnibus Performance Incentive Plan*	Filed as Exhibit 4.4 to Registration Statement on Form S-8 (file No. 333-238173) filed on May 11, 2020
10.71	Form of Notice of Restricted Stock Unit Award Terms and Conditions for Non-Employee Directors*	Filed as Exhibit 10.5 to Form 10-Q (File No. 001-38147) filed on August 10, 2020
10.72	Form Notice of Performance-based Cash Award and Terms and Conditions*	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on May 4, 2021

10.73	Form Notice of Performance-based Market Share Units and Terms and Conditions*	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on May 4, 2021
10.74	Form of Notice of Restricted Stock Unit Award Terms and Conditions for Non-Employee Directors*	Filed as Exhibit 10.1 to Form 10-Q (File No. 001-38147) filed on August 3, 2021
10.75	Support Agreement, dated as of October 22, 2020, by and among CONSOL Energy Inc. and CONSOL Coal Resources LP	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on October 23, 2020
10.76	Amendment to CONSOL Energy Inc. 2020 Amended and Restated Omnibus Performance Incentive Plan, effective as of December 30, 2020 (incorporated by reference to Exhibit 4.5 to the Company's Registration Statement on Form S-8 filed on December 31, 2020)	Filed as Exhibit 4.5 to Form S-8 (File No. 001-38147) filed on December 31, 2020
10.77	First Amendment to Employment Agreement of James A. Brock*	Filed as Exhibit 10.45 to Form 10-K (File No. 001-38147) filed on February 12, 2021
10.78	Second Amendment to Employment Agreement of James A. Brock*	Filed as Exhibit 10.44 to Form 10-K (File No. 001-38147) filed on February 11, 2022
10.79	Form of Notice of Restricted Stock Unit Award Terms and Conditions for Non-Employee Directors*	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on August 4, 2022
10.80	Form Notice of Performance Based Cash Award and Terms and Conditions*	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on May 3, 2022
10.81	Form Notice of Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on May 3, 2022
10.82	2022 Executive Short-Term Incentive Program Terms and Conditions*	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on May 3, 2022
10.83	Third Amendment to Employment Agreement of James A. Brock*	Filed as Exhibit 10.52 to Form 10-K (File No. 001-38147) filed on February 10, 2023
10.84	Change in Control Severance Agreement for Mitesh Thakkar*	Filed as Exhibit 10.53 to Form 10-K (File No. 001-38147) filed on February 10, 2023
10.85	Form Notice of Restricted Stock Unit Award and Terms and Conditions for Non-Employee Directors*	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on August 8, 2023
10.86	Form Notice of Performance-based Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on August 8, 2023
10.87	Form Notice of Service-based Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.4 to Form 10-Q (File No. 001-38147) filed on August 8, 2023
10.88	2023 Executive Short-Term Incentive Program Terms and Conditions*	Filed as Exhibit 10.5 to Form 10-Q (File No. 001-38147) filed on August 8, 2023
10.89	Form Notice of Performance-based Restricted Stock Unit Award Terms and Conditions*	Filed as Exhibit 10.1 to Form 10-Q (File No. 001-38147) filed on May 7, 2024

10.90	Form Notice of Service-based Restricted Stock Unit Award and Terms and Conditions*	Filed as Exhibit 10.2 to Form 10-Q (File No. 001-38147) filed on May 7, 2024
10.91	2024 Executive Short-Term Incentive Program Terms and Conditions*	Filed as Exhibit 10.3 to Form 10-Q (File No. 001-38147) filed on May 7, 2024
10.92	Form Notice of Restricted Stock Unit Award and Terms and Conditions for Non-Employee Directors*	Filed as Exhibit 10.1 to Form 10-Q (File No. 001-38147) filed on August 8, 2024
10.93	Waiver, Acknowledgement and Amendment, dated August 20, 2024, by and between CONSOL Energy Inc. and James A. Brock	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on August 21, 2024
10.94	Separation of Employment and General Release Agreement, by and between the Company and Martha A. Wiegand	Filed as Exhibit 10.1 to Form 8-K (File No. 001-38147) filed on November 12, 2024
10.95	Form of Indemnification and Advancement Agreement	Filed as Exhibit 10.3 to Form 8-K (File No. 001-38147) filed on January 15, 2025
19	Core Natural Resources, Inc. Insider Trading Policy	Filed herewith
21	Subsidiaries of Core Natural Resources, Inc.	Filed herewith
23.1	Consent of Ernst & Young LLP	Filed herewith
23.2	Consent of The John T. Boyd Company	Filed herewith
31.1	Certification of Chief Executive Officer pursuant to Section 302 of Sarbanes-Oxley Act of 2002	Filed herewith
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002	Furnished herewith
95	Mine Safety Disclosure	Filed herewith
96.1	Technical Report Summary, Coal Resources and Coal Reserves, Pennsylvania Mining Complex, Pennsylvania and West Virginia	Filed herewith
96.2	Technical Report Summary, Coal Resources and Coal Reserves, Itmann Mining Complex, Wyoming and McDowell Counties, West Virginia	Filed as Exhibit 96.2 to Form 10-K (File No. 001-38147) filed on February 10, 2023
96.3	Technical Report Summary, Coal Resources, Mason Dixon and River Mine Properties, Greene County, Pennsylvania, Marshall, Monongalia, and Wetzel Counties, West Virginia	Filed as Exhibit 96.3 to Form 10-K (File No. 001-38147) filed on February 11, 2022
97	Core Natural Resources, Inc. Compensation Recoupment Policy	Filed herewith
101	Interactive Data File (Form 10-K for the year ended December 31, 2024, furnished in Inline XBRL)	Filed herewith
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)	Filed herewith

* Indicates management contract or compensatory plan or arrangement.

** Information in this exhibit identified by brackets is confidential and has been excluded pursuant to Item 601(b)(10)(iv) of Regulation S-K because it (i) is not material and (ii) would likely cause competitive harm to the Company if publicly disclosed.

*** The schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K and will be provided to the Securities and Exchange Commission upon request.

Schedules and attachments to this Exhibit have been omitted pursuant to Item 601(a)(5) of Regulation S-K. The Company hereby undertakes to furnish supplementally copies of any of the omitted schedules upon request by the Securities and Exchange Commission.

Supplemental Information

No annual report or proxy material has been sent to shareholders of the Company at the time of filing of this Form 10-K. An annual report will be sent to shareholders and to the commission subsequent to the filing of this Form 10-K.

In accordance with Item 601(b)(32)(ii), Exhibits 32.1 and 32.2 are being furnished and not filed.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, as of the 20th day of February, 2025.

CORE NATURAL RESOURCES, INC.

By: _____ /s/ PAUL A. LANG
Paul A. Lang
Director, Chief Executive Officer
(Principal Executive Officer)

By: _____ /s/ MITESHKUMAR B. THAKKAR
Miteshkumar B. Thakkar
Chief Financial Officer and President
(Principal Financial Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed as of the 20th day of February, 2025, by the following persons on behalf of the registrant in the capacities indicated:

Signature

Title

/s/ PAUL A. LANG

Paul A. Lang

Director, Chief Executive Officer
(Principal Executive Officer)

/s/ MITESHKUMAR B. THAKKAR

Miteshkumar B. Thakkar

Chief Financial Officer and President
(Principal Financial Officer)

/s/ JOHN M. ROTHKA

John M. Rothka

Chief Accounting Officer
(Principal Accounting Officer)

/s/ JAMES A. BROCK

James A. Brock

Director and Executive Chair of the Board of Directors

/s/ RICHARD A. NAVARRE

Richard A. Navarre

Lead Independent Director

/s/ VALLI PERERA

Valli Perera

Director

/s/ JOSEPH P. PLATT

Joseph P. Platt

Director

/s/ CASSANDRA PAN

Cassandra Pan

Director

/s/ PATRICK A. KRIEGSHAUSER

Patrick A. Kriegshauser

Director

/s/ HOLLY KELLER KOEPPPEL

Holly Keller Koepfel

Director

DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934

As of the date of this Annual Report on Form 10-K, Core Natural Resources, Inc. (“Core,” “we,” “our,” “us,” “our company” and “the company”) has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: common stock, par value \$0.01 per share (“common stock”).

The following description of our common stock is based upon, and is qualified by reference to, our amended and restated certificate of incorporation and our amended and restated bylaws, in each case as may be amended from time to time, each of which is incorporated by reference as an exhibit to this Annual Report on Form 10-K.

General

Core is authorized to issue 125,500,000 shares, of which:

- 125,000,000 shares are designated as common stock; and
- 500,000 shares are designated as preferred stock (“preferred stock”).

As of January 31, 2025, we had 54,016,722 shares of common stock outstanding and no shares of preferred stock outstanding.

Common Stock

Dividend Rights. Holders of our common stock are entitled to receive dividends only if and when declared by the Board of Directors. However, no dividend will be declared or paid on our common stock until we have paid (or declared and set aside funds for payment of) all dividends that have accrued on all classes of our outstanding preferred stock.

Voting Rights. Holders of our common stock are entitled to one (1) vote per share and they do not have any cumulative voting rights.

Liquidation Rights. Upon any liquidation, dissolution or winding up of Core, whether voluntary or involuntary, after payments to holders of preferred stock of amounts determined by the Board of Directors, plus any accrued dividends, the company’s remaining assets will be divided among holders of our common stock pro rata.

Preemptive or Other Subscription Rights. Holders of our common stock do not have any preemptive right to subscribe for any securities of the company.

Conversion and Other Rights. No conversion, redemption or sinking fund provisions apply to our common stock, and our common stock is not liable to further call or assessment by the company. All issued and outstanding shares of our common stock are fully paid and non-assessable.

Preferred Stock

Under the terms of our amended and restated certificate of incorporation, our Board of Directors is authorized to issue up to 500,000 shares of preferred stock in one or more series without further action by the holders of our common stock. Our Board of Directors has the discretion, subject to limitations prescribed by Delaware law and by our amended and restated certificate of incorporation, to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, terms of redemption and liquidation preferences, of each series of preferred stock.

Although our Board of Directors does not currently intend to do so, it could authorize us to issue a class or series of preferred stock that could, depending upon the terms of the particular class or series, delay, defer or prevent a transaction or a change of control of our company, even if such transaction or change of control involves a premium price for our stockholders or our stockholders believe that such transaction or change of control may be in their best interests. Our Board of Directors may be able to issue preferred stock with voting rights or conversion rights that, if exercised, could adversely affect the voting power of the holders of our common stock.

Anti-Takeover Effects of Various Provisions of Delaware Law and our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Provisions of the Delaware General Corporation Law (“DGCL”) and our amended and restated certificate of incorporation and amended and restated bylaws could make it more difficult to acquire Core by means of a tender offer, a proxy contest or otherwise, or to remove incumbent officers and directors. These provisions are expected to discourage certain types of coercive takeover practices and takeover bids that our Board of Directors may consider inadequate and to encourage persons seeking to acquire control of the company to first negotiate with our Board of Directors. We believe that the benefits of increased protection of our ability to negotiate with the proponent of an unfriendly or unsolicited proposal to acquire or restructure it outweigh the disadvantages of discouraging takeover or acquisition proposals because, among other things, negotiation of these proposals could result in an improvement of their terms.

Delaware Anti-Takeover Provisions. Core is subject to Section 203 of the DGCL, an anti-takeover statute. In general, Section 203 of the DGCL prohibits a publicly-held Delaware corporation from engaging in a “business combination” with an “interested stockholder” for a period of three years following the time the person became an interested stockholder, unless the business combination or the acquisition of shares that resulted in a stockholder becoming an interested stockholder is approved in a prescribed manner. Generally, a “business combination” includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. Generally, an “interested stockholder” is a person who, together with affiliates and associates, owns (or within three years prior to the determination of interested stockholder status did own) 15% or more of a corporation’s voting stock. The existence of this provision would be expected to have an anti-takeover effect with respect to transactions not approved in advance by our Board of Directors, including discouraging attempts that might result in a premium over the market price for the shares of common stock held by our stockholders.

Size of Board; Vacancies; Removal. Our amended and restated bylaws provide that, subject to the provisions set forth in Article X thereof, the number of directors on our Board of Directors will be fixed exclusively by our Board of Directors. Subject to the provisions set forth in Article X of our amended and restated bylaws, any vacancies created in our Board of Directors resulting from any increase in the authorized number of directors or the death, resignation, retirement, disqualification, removal from office or other cause will be filled by a majority of the Board of Directors then in office, even if less than a quorum is present, or by a sole remaining director. Any director appointed to fill a vacancy on our Board of Directors will be appointed for a term expiring at the next election of directors and until his or her successor has been elected and qualified. Our amended and restated bylaws provide that, subject to the provisions set forth in Article X thereof, stockholders may remove our directors with or without cause, with the approval of a majority of shares entitled to vote at an election of directors.

Stockholder Action by Written Consent. Our amended and restated certificate of incorporation provides that stockholders may not act by written consent unless such written consent is unanimous. Stockholder action must otherwise take place at the annual or a special meeting of our stockholders.

Special Stockholder Meetings. Our amended and restated certificate of incorporation provides that the chairman of our Board of Directors, our chief executive officer or our Board of Directors pursuant to a resolution adopted by a majority of the entire Board of Directors may call special meetings of our stockholders.

Advance Notice for Stockholder Proposals and Nominations. Our amended and restated bylaws establish advance notice procedures with respect to stockholder proposals and nomination of candidates for election as directors (other than nominations made by or at the direction of the Board of Directors).

Certain Effects of Authorized but Unissued Stock. We may issue additional shares of common stock or preferred stock without stockholder approval, subject to applicable rules of the New York Stock Exchange (“NYSE”) and Delaware law, for a variety of corporate purposes, including future public or private offerings to raise additional capital, corporate acquisitions, and employee benefit plans and equity grants. The existence of unissued and unreserved common and preferred stock may enable us to issue shares to persons who are friendly to current management, which could discourage an attempt to obtain control of Core by means of a proxy contest, tender offer, merger or otherwise. We will not solicit approval of our stockholders for issuance of common or preferred stock unless our Board of Directors believes that approval is advisable or is required by applicable stock exchange rules or Delaware law.

No Cumulative Voting. The DGCL provides that stockholders are denied the right to cumulate votes in the election of directors unless the company's certificate of incorporation provides otherwise. Our amended and restated certificate of incorporation does not provide for cumulative voting.

Exclusive Forum. Our amended and restated certificate of incorporation provides that unless the Board of Directors otherwise determines, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for any derivative action or proceeding brought on behalf of Core, any action asserting a claim for or based on a breach of a fiduciary duty owed by any current or former director or officer of Core to Core or to Core stockholders, including a claim alleging the aiding and abetting of such a breach of fiduciary duty, any action asserting a claim against Core or any current or former director or officer of Core arising pursuant to any provision of the DGCL or our amended and restated certificate of incorporation or bylaws, any action asserting a claim relating to or involving Core governed by the internal affairs doctrine, or any action asserting an "internal corporate claim" as that term is defined in Section 115 of the DGCL. However, if the Court of Chancery of the State of Delaware dismisses any such action for lack of subject matter jurisdiction, the action may be brought in the federal court for the District of Delaware.

Listing

Our common stock is listed on the NYSE under the symbol "CNR."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

Core Natural Resources, Inc.
Insider Trading Compliance Policy

Effective as of January 14, 2025

Core Natural Resources, Inc. (the "Company") seeks to promote a culture that encourages ethical conduct and a commitment to compliance with the law. We require our personnel to comply at all times with federal laws and regulations governing insider trading. This policy sets forth procedures designed to help comply with these laws and regulations.

Persons Covered

You must comply with this policy if you are:

- a director, officer or employee;
- an entity controlled by a director, officer or employee; or
- a contractor, consultant, or other person designated by the Company.

Individuals subject to this policy are responsible for ensuring that members of their household comply with this policy.

Policy Statement

Unless otherwise permitted by this policy, you must not:

- purchase, sell, gift or otherwise transfer any security of the Company while you possess material nonpublic information about the Company;
- purchase, sell, gift or otherwise transfer any security of any other company, while you possess material nonpublic information about the other company that you obtained in connection with your employment by or service to the Company;
- directly or indirectly communicate material nonpublic information to anyone outside the Company; or
- directly or indirectly communicate material nonpublic information to anyone within the Company except on a need-to-know basis.

For this purpose:

- *securities* includes stocks, bonds, notes, debentures, options, warrants, equity and other convertible securities, as well as derivative instruments;
- *purchase* includes not only the actual purchase of a security, but also any contract to purchase or otherwise acquire a security;
- *sale* includes not only the actual sale of a security, but also any contract to sell or otherwise dispose of a security;
- *material* means likely to have a significant effect on the market price of the security (also understood to mean a substantial likelihood that a reasonable investor would consider the information important in making an investment decision); and

- *nonpublic* means not broadly disseminated to the general public so that investors have been able to factor the information into the market price of the security.

To understand how these terms apply to specific circumstances, or for any other questions about this policy, you should ask the Company's Chief Legal Officer (the "Compliance Officer").

Quarterly Blackout Periods

The Compliance Officer will designate a list of persons who (with their controlled entities and household members) must not purchase, sell, gift or otherwise transfer any security of the Company during any blackout period, except as otherwise permitted by this policy. The list of designated persons will include the Company's directors and executive officers and certain employees that have regular access to material nonpublic information regarding the Company's quarterly financial results.

The quarterly blackout period:

- begins after the close of trading on the last day of each fiscal quarter; and
- ends after completion of one full trading day after the earnings release for that quarter.

Additional Blackout Periods

From time to time, the Compliance Officer may determine that an additional blackout period is appropriate. Persons subject to an additional blackout period will be notified by the Compliance Officer and must not purchase, sell, gift or otherwise transfer any security of the Company, except as otherwise permitted by this policy, and must not disclose that an additional blackout period is in effect.

Pre-Clearance of Transactions

The Compliance Officer will designate a list of persons who (with their controlled entities and household members) must pre-clear each transaction in any security of the Company. The list of designated persons will include the Company's directors and executive officers and certain employees that have regular access to material nonpublic information regarding the Company's quarterly financial results.

To submit a pre-clearance request, you must follow the procedures established by the Compliance Officer.

Pre-clearance approval:

- must be requested at least two business days in advance of the proposed transaction;
- may be granted or withheld in the sole discretion of the Compliance Officer (or the Chief Executive Officer for transactions by the Compliance Officer);
- remains subject to your independent obligation to confirm that you do not possess material nonpublic information at the time of your transaction;
- will not constitute legal advice that a proposed transaction complies with applicable law;
- will not result in liability to the Company or any other person if delayed or withheld; and
- is not required for transactions under a previously approved Rule 10b5-1 plan.

Exempt Transactions

This policy, except for provisions set forth in the Prohibited Transactions section below, does not apply to:

- transactions directly with the Company;
- gift transactions for family or estate planning purposes, where securities are gifted to a person or entity subject to this policy, except that gift transactions involving Company securities are subject to pre-clearance;
- transactions relating to equity incentive awards without any open-market sale of securities (e.g., cash exercises of stock options or the “net settlement” of restricted stock units but not broker-assisted cashless exercises or open-market sales to cover taxes upon the vesting of restricted stock units); or
- transactions under a pre-cleared Rule 10b5-1 plan.

Trading Plans

The restrictions in this policy, except for provisions set forth in the Prohibited Transactions section below, do not apply to transactions under a trading plan that satisfies the conditions of Rule 10b5-1 and has been approved by the Compliance Officer (or the Chief Executive Officer for trading plans entered into by the Compliance Officer).

A trading plan may be modified outside of a blackout period when you do not possess material nonpublic information. Modifications to and terminations of a trading plan must be pre-approved by the Compliance Officer (or the Chief Executive Officer for modifications or terminations by the Compliance Officer).

Prohibited Transactions

You may not engage in:

- short sales (i.e., sales of shares that you do not own at the time of sale);
- options trading, including puts, calls, or other derivative securities on an exchange, an over-the-counter market, or any other organized market;
- hedging transactions, such as prepaid variable forward contracts, equity swaps, collars, exchange funds, or other transactions that hedge or offset any decrease in market value of the Company’s equity securities; and
- pledging Company securities as collateral for a loan, purchasing Company securities on margin (i.e., borrowing money to purchase the securities), or placing Company securities in a margin account.

Post-Termination Transactions

If you possess material nonpublic information when your employment by or service to the Company terminates, the restrictions set forth in “Policy Statement” above continue to apply until that information has become public or is no longer material.

Policy Administration

The Compliance Officer has authority to interpret and implement this policy. This authority includes interpreting or waiving the terms of the policy, to the extent consistent with its general purpose and applicable securities laws. The Chief Executive Officer will administer the policy as it applies to any trading activity by the Compliance Officer.

Certification of Compliance

You may be asked periodically to certify your compliance with the terms and provisions of this policy.

Core Natural Resources, Inc.
SUBSIDIARIES
As of February 20, 2025

(In alphabetical order)

ACI Terminal, LLC (a Delaware limited liability company)
Allegheny Land LLC (a Delaware limited liability company)
AMVEST Gas Resources, LLC (a Virginia limited liability company)
AMVEST LLC (a Virginia limited liability company)
AMVEST West Virginia Coal, L.L.C. (a West Virginia limited liability company)
Arch Coal Australia Holdings PTY LTD (an Australian proprietary limited company)
Arch Coal Australia PTY LTD (an Australia proprietary limited company)
Arch Coal Group, LLC (a Delaware limited liability company)
Arch Coal Operations LLC (a Delaware limited liability company)
Arch Coal West, LLC (a Delaware limited liability company)
Arch Land LLC (a Delaware limited liability company)
Arch of Australia PTY LTD (an Australian proprietary limited company)
Arch of Wyoming, LLC (a Delaware limited liability company)
Arch Receivable Company, LLC (Delaware limited liability company)
Arch Reclamation Services LLC (a Delaware limited liability company)
Arch Resources, Inc. (a Delaware corporation)
Arch Western Acquisition Corporation (a Delaware corporation)
Arch Western Acquisition, LLC (a Delaware limited liability company)
Arch Western Bituminous Group, LLC (a Delaware limited liability company)
Arch Western Resources, LLC (a Delaware limited liability company)
Ark Land KH LLC (a Delaware limited liability company)
Ark Land LLC (a Delaware limited liability company)
Ark Land LT LLC (a Delaware limited liability company)
Ark Land WR LLC (Delaware limited liability company)
Ashland Terminal, Inc. (a Delaware corporation)
Atlantic Holdings JV LLC (a Delaware limited liability company)
Braxton-Clay Land & Mineral, LLC (a West Virginia limited liability company)
Bronco Mining Company LLC (a West Virginia limited liability company)
Catenary Coal Holdings LLC (a Delaware limited liability company)
CFOAM LLC (a Delaware limited liability company)
CoalQuest Development LLC (a Delaware limited liability company)
Conrhein Coal Company (a Pennsylvania general partnership)
CONSOL Amonate Facility LLC (a Delaware limited liability company)
CONSOL Amonate Mining Company LLC (a Delaware limited liability company)
CONSOL Coal Finance Corp. (a Delaware corporation)
CONSOL Energy Canada Ltd. (a Canadian corporation)
CONSOL Energy Sales Company LLC (formerly CONSOL Sales Company) (a Delaware limited liability company)
CONSOL Funding LLC (a Delaware limited liability company)
CONSOL Innovations LLC (a Delaware limited liability company)
CONSOL Marine Terminals LLC (a Delaware limited liability company)
CONSOL Met Coal Holding Company LLC (a Delaware limited liability company)
CONSOL Mining Company LLC (a Delaware limited liability company)
CONSOL Mining Holding Company LLC (a Delaware limited liability company)
CONSOL of Canada LLC (a Delaware limited liability company)

CONSOL of Kentucky LLC (a Delaware limited liability company)
CONSOL Operating LLC (a Delaware limited liability company)
Consol Pennsylvania Coal Company LLC (formerly Consol Pennsylvania Coal Company) (a Delaware limited liability company)
CONSOL Pennsylvania Mine Holding LLC (a Delaware limited liability company)
CONSOL RCPC LLC (a Delaware limited liability company)
Consol Thermal Holdings LLC (a Delaware limited liability company)
Core Global LLC (a Delaware limited liability company)
Core Natural Resources Asia-Pacific PTE. LTD. (a Singapore private limited company)
Core Natural Resources Europe Limited (an England and Wales private limited company)
Core Purchasing LLC (a Delaware limited liability company)
Core Sales, Inc. (a Delaware corporation)
Energy Development LLC (an Iowa limited liability company)
Fola Coal Company, L.L.C. d/b/a Powellton Coal Company (a West Virginia limited liability company)
Hawthorne Coal Company LLC (a West Virginia limited liability company)
Helvetia Coal Company LLC (a Pennsylvania limited liability company)
Hunter Ridge Coal LLC (a Delaware limited liability company)
Hunter Ridge Holdings, Inc. (a Delaware corporation)
Hunter Ridge LLC (a Delaware limited liability company)
ICG Beckley, LLC (a Delaware limited liability company)
ICG East Kentucky, LLC (a Delaware limited liability company)
ICG Eastern Land, LLC (a Delaware limited liability company)
ICG Eastern, LLC (a Delaware limited liability company)
ICG Natural Resources, LLC (a Delaware limited liability company)
ICG Tygart Valley, LLC (a Delaware limited liability company)
ICG, LLC (a Delaware limited liability company)
International Energy Group, LLC (a Delaware limited liability company)
Island Creek Coal Company LLC (a Delaware limited liability company)
Itmann Mining Company LP (a Delaware limited partnership)
Juliana Mining Company LLC (a West Virginia limited liability company)
King Knob Coal Co. LLC (a West Virginia limited liability company)
Laurel Run Mining Company LLC (a Virginia limited liability company)
Leatherwood, LLC (a Pennsylvania limited liability company)
Little Eagle Coal Company, L.L.C. (a West Virginia limited liability company)
Maidsville Landing Terminal, LLC (a Delaware limited liability company)
Marine Coal Sales LLC (a Delaware limited liability company)
Meadow Coal Holdings, LLC (a Delaware limited liability company)
Melrose Coal Company LLC (a West Virginia limited liability company)
Mingo Logan Coal LLC (a Delaware limited liability company)
Mountain Coal Company, L.L.C. (a Delaware limited liability company)
Mountain Gem Land LLC (a West Virginia limited liability company)
Mountain Mining LLC (a Delaware limited liability company)
Mountaineer Land LLC (a Delaware limited liability company)
MTB LLC (a Delaware limited liability company)
Nicholas-Clay Land & Mineral, LLC (a Virginia limited liability company)
Otter Creek Coal, LLC (a Delaware limited liability company)
PA Mining Complex GP LLC (a Delaware limited liability company)
PA Mining Complex LP (a Delaware limited partnership)
Patriot Mining Company LLC (a West Virginia limited liability company)
Prairie Holdings, Inc. (a Delaware corporation)
R&PCC LLC (a Pennsylvania limited liability company)
Shelby Run Mining Company, LLC (a Delaware limited liability company)

TECPART LLC (a Delaware limited liability company)
Terry Eagle Coal Company, L.L.C. (a West Virginia limited liability company)
Terry Eagle Limited Partnership (a West Virginia limited partnership)
The Sycamore Group, LLC (a West Virginia limited liability company)
Thunder Basin Coal Company, L.L.C. (a Delaware limited liability company)
Transformer LP Holdings Inc. (a Delaware corporation)
Triton Coal Company, LLC (a Delaware limited liability company)
Upshur Property LLC (a Delaware limited liability company)
Vaughan Railroad Company LLC (a West Virginia limited liability company)
Vindex Energy LLC (a West Virginia limited liability company)
Western Energy Resources LLC (a Delaware limited liability company)
White Wolf Energy LLC (a Virginia limited liability company)
Windsor Coal Company LLC (a West Virginia limited liability company)
Wolf Run Mining LLC (a West Virginia limited liability company)
Wolfpen Knob Development Company LLC (a Virginia limited liability company)

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- Registration Statement (Form S-8 No. 333-221727) pertaining to the CONSOL Energy Inc. 2020 Amended and Restated Omnibus Performance Incentive Plan,
- Registration Statement (Form S-8 No. 333-251852) pertaining to the CONSOL Energy Inc. 2020 Amended and Restated Omnibus Performance Incentive Plan, and
- Registration Statement (Form S-8 No. 333-238173) pertaining to the CONSOL Energy Inc. 2020 Amended and Restated Omnibus Performance Incentive Plan;

of our reports dated February 20, 2025, with respect to the consolidated financial statements of Core Natural Resources, Inc. and the effectiveness of internal control over financial reporting of Core Natural Resources, Inc. included in this Annual Report (Form 10-K) of Core Natural Resources, Inc. for the year ended December 31, 2024.

/s/ Ernst & Young LLP
Pittsburgh, Pennsylvania
February 20, 2025

John T. Boyd Company
4000 Town Center Boulevard, Suite 300
Canonsburg, PA 15317

CONSENT OF THIRD-PARTY QUALIFIED PERSON

The John T. Boyd Company (“BOYD”) in connection with the filing of the Core Natural Resources, Inc. (formerly known as CONSOL Energy Inc.) Annual Report on Form 10-K (the “Form 10-K”), consent to:

- the filing and use of the technical report summary titled “Technical Report Summary, Coal Resources and Coal Reserves, Pennsylvania Mining Complex, Pennsylvania and West Virginia” (the “PAMC Technical Report”), with an effective date of December 31, 2024, as an exhibit to and referenced in the Form 10-K;
- the filing and use of the technical report summary titled “Technical Report Summary, Coal Resources and Coal Reserves, Itmann Mining Complex, Wyoming and McDowell Counties, West Virginia” (the “Itmann Technical Report”), with an effective date of December 31, 2022, as an exhibit to and referenced in the Form 10-K;
- the filing and use of the technical report summary titled “Technical Report Summary, Coal Resources, Mason Dixon and River Mine Properties, Greene County, Pennsylvania, Marshall, Monongalia, and Wetzel Counties, West Virginia” (the “Mason Dixon Technical Report” and together with the PAMC Technical Report and Itmann Technical Report, the “Technical Reports”), with an effective date of December 31, 2021, as an exhibit to and referenced in the Form 10-K;
- the use of and references to our name, including our status as an expert or “qualified person” (as defined in Subpart 1300 of Regulation S-K promulgated by the Securities and Exchange Commission), in connection with the Form 10-K and any such Technical Report; and
- the information derived, summarized, quoted or referenced from any of the Technical Reports, or portions thereof, that was prepared by BOYD, that BOYD supervised the preparation of and/or that was reviewed and approved by BOYD, that is included or incorporated by reference in the Form 10-K.

BOYD is responsible for authoring, and this consent pertains to, the Technical Reports. BOYD certifies that it has read the Form 10-K and that it fairly and accurately represents the information in the sections of the Technical Reports for which BOYD is responsible.

BOYD also consents to the incorporation by reference in Core Natural Resources, Inc.’s registration statements on Form S-8 (Nos. 333-221727, 333-238173 and 333-251852) of the above items as included in the Form 10-K.

The John T. Boyd Company
/s/ John T. Boyd II
President and CEO
February 20, 2025

CERTIFICATIONS

I, Paul A. Lang, certify that:

1. I have reviewed this annual report on Form 10-K of Core Natural Resources, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2025

/s/ Paul A. Lang

Paul A. Lang

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATIONS

I, Miteshkumar B. Thakkar, certify that:

1. I have reviewed this annual report on Form 10-K of Core Natural Resources, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 20, 2025

/s/ Miteshkumar B. Thakkar

Miteshkumar B. Thakkar
Chief Financial Officer and President
(Principal Financial Officer)

CERTIFICATION
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002,
18 U.S.C. Section 1350

I, Paul A. Lang, Chief Executive Officer (principal executive officer) of Core Natural Resources, Inc. (the “Registrant”), certify that to my knowledge, based upon a review of the Annual Report on Form 10-K for the period ended December 31, 2024, of the Registrant (the “Report”):

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 20, 2025

/s/ Paul A. Lang

Paul A. Lang

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002,
18 U.S.C. Section 1350

I, Miteshkumar B. Thakkar, Chief Financial Officer (principal financial officer) of Core Natural Resources, Inc. (the “Registrant”), certify that to my knowledge, based upon a review of the Annual Report on Form 10-K for the period ended December 31, 2024, of the Registrant (the “Report”):

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

Date: February 20, 2025

/s/ Miteshkumar B. Thakkar

Miteshkumar B. Thakkar

Chief Financial Officer and President

(Principal Financial Officer)

Mine Safety and Health Administration Safety Data

We believe that Core Natural Resources, Inc. (the Company) is one of the safest mining companies in the world. The Company has in place health and safety programs that include extensive employee training, accident prevention, workplace inspection, emergency response, accident investigation, regulatory compliance and program auditing. The objectives of our health and safety programs are to eliminate workplace incidents, comply with all mining-related regulations and provide support for both regulators and the industry to improve mine safety.

The operation of our mines is subject to regulation by the federal Mine Safety and Health Administration (MSHA) under the Federal Mine Safety and Health Act of 1977 (Mine Act). MSHA inspects our mines on a regular basis and issues various citations, orders and violations when it believes a violation has occurred under the Mine Act. We present information below regarding certain mining safety and health violations, orders and citations, issued by MSHA and related assessments and legal actions and mine-related fatalities with respect to our coal mining operations. In evaluating this information, consideration should be given to factors such as: (i) the number of violations, orders and citations will vary depending on the size of the coal mine, (ii) the number of violations, orders and citations issued will vary from inspector to inspector and mine to mine, and (iii) violations, orders and citations can be contested and appealed, and in that process, are often reduced in severity and amount, and are sometimes dismissed.

The table below sets forth for the year ended December 31, 2024, for each coal mine of the Company, the total number of: (i) violations of mandatory health or safety standards that could significantly and substantially contribute to the cause and effect of a coal or other mine safety or health hazard under section 104 of the Mine Act for which the operator received a citation from MSHA; (ii) orders issued under section 104(b) of the Mine Act; (iii) citations and orders for unwarrantable failure of the mine operator to comply with mandatory health or safety standards under section 104(d) of the Mine Act; (iv) flagrant violations under section 110(b)(2) of the Mine Act; (v) imminent danger orders issued under section 107(a) of the Mine Act; (vi) the total dollar value of proposed assessments from MSHA (regardless of whether the Company has challenged or appealed the assessment); (vii) the total number of mining-related fatalities; (viii) notices from MSHA of a pattern of violations of mandatory health or safety standards that are of such nature as could have significantly and substantially contributed to the cause and effect of coal or other mine health or safety hazards under section 104(e) of the Mine Act; (ix) notices from MSHA regarding the potential to have a pattern of violations as referenced in (viii) above; and (x) pending legal actions before the Federal Mine Safety and Health Review Commission (as of December 31, 2024) involving such coal or other mine, as well as the aggregate number of legal actions instituted and the aggregate number of legal actions resolved during the reporting period.

Mine or Operating Name/MSHA Identification Number	Section 104 S&S Citations	Section 104(b) Orders	Section 104(d) Citations and Orders	Section 110(b)(2) Violations	Section 107(a) Orders	Total Dollar Value of MSHA Assessments Proposed (In Dollars)	Total Number of Mining Related Fatalities	Received Notice of Pattern of Violations Under Section 104(e)	Received Notice of Potential to have Pattern Under Section 104(e)	Legal Actions Pending as of Last Day of Period (1)	Legal Actions Initiated During Period	Legal Actions Resolved During Period
<u>Active Operations</u>												
Bailey	36-07230	31	—	—	—	152,429	—	No	No	3	7	7
Enlow Fork	36-07416	41	—	—	—	170,506	—	No	No	3	8	10
Harvey	36-10045	7	—	—	—	41,139	—	No	No	1	1	1
Itmann No 5	46-09569	85	—	—	—	546,194	—	No	No	5	8	7
Itmann No 5 Plant	46-09598	3	—	—	—	2,698	—	No	No	—	—	—
Meigs #31	33-01172	—	—	—	—	143	—	No	No	—	—	—
		<u>167</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>913,109</u>	<u>—</u>			<u>12</u>	<u>24</u>	<u>25</u>

(1) See table below for additional detail regarding Legal Actions Pending as of December 31, 2024. With respect to Contests of Proposed Penalties, we have included the number of dockets (as opposed to citations) when counting the number of Legal Actions Pending as of December 31, 2024.

Mine or Operating Name/MSHA Identification Number		Contests of Citations, Orders (as of 12.31.24)	Contests of Proposed Penalties (as of 12.31.24)		Complaints for Compensation (as of 12.31.24)	Complaints of Discharge, Discrimination or Interference (as of 12.31.24)	Applications for Temporary Relief (as of 12.31.24)	Appeals of Judges' Decisions or Order (as of 12.31.24)
		(a)	Dockets	Citations				
<u>Active Operations</u>								
Bailey	36-07230	—	3	6	—	—	—	2
Enlow Fork	36-07416	—	3	13	—	—	—	1
Harvey	36-10045	—	1	1	—	—	—	—
Itmann No 5	46-09569	—	5	27	—	—	—	—
Itmann No 5 Plant	46-09598	—	—	—	—	—	—	—
Meigs #31	33-01172	—	—	—	—	—	—	—
		<u>—</u>	<u>12</u>	<u>47</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>3</u>

(a) Represents (if any) contests of citations and orders, which typically are filed prior to an operator's receipt of a proposed penalty assessment from MSHA or relate to orders for which penalties are not assessed (such as imminent danger orders under Section 107 of the Mine Act). This category includes: (i) contests of citations or orders issued under

section 104 of the Mine Act, (ii) contests of imminent danger withdrawal orders under section 107 of the Mine Act, and (iii) Emergency response plan dispute proceedings (as required under the Mine Improvement and New Emergency Response Act of 2006, Pub. L. No. 109-236, 120 Stat. 493).

(b) Represents (if any) contests of proposed penalties, which are administrative proceedings before the Federal Mine Safety and Health Review Commission ("FMSHRC") challenging a civil penalty that MSHA has proposed for the violation contained in a citation or order.

(c) Represents (if any) complaints for compensation, which are cases under section 111 of the Mine Act that may be filed with the FMSHRC by miners idled by a closure order issued by MSHA who are entitled to compensation.

(d) Represents (if any) complaints of discharge, discrimination or interference under section 105 of the Mine Act, which cover: (i) discrimination proceedings involving a miner's allegation that he or she has suffered adverse employment action because he or she engaged in activity protected under the Mine Act, such as making a safety complaint, and (ii) temporary reinstatement proceedings involving cases in which a miner has filed a complaint with MSHA stating that he or she has suffered such discrimination and has lost his or her position. Complaints of Discharge, Discrimination, or Interference are also included in Contests of Proposed Penalties, Column B.

(e) Represents (if any) applications for temporary relief, which are applications under section 105(b)(2) of the Mine Act for temporary relief from any modification or termination of any order or from any order issued under section 104 of the Mine Act (other than citations issued under section 104(a) or (f) of the Mine Act).

(f) Represents (if any) appeals of judges' decisions or orders to the FMSHRC, including petitions for discretionary review and review by the FMSHRC on its own motion.

TECHNICAL REPORT SUMMARY
COAL RESOURCES AND COAL RESERVES
PENNSYLVANIA MINING COMPLEX
Pennsylvania and West Virginia

Prepared For
CONSOL ENERGY INC.
Canonsburg, Pennsylvania

By
John T. Boyd Company
Mining and Geological Consultants
Pittsburgh, Pennsylvania



Report No. 2755.102
FEBRUARY 2025



John T. Boyd Company
Mining and Geological Consultants

Owner
John W. Boyd

President and CEO
John T. Boyd II

Managing Director and COO
William L. Lewis

Presidents
Robert J. Farmer
Gregory (Jason) Han
Michael L. Weiss
Michael F. Wick
William P. Wolf

Managing Director - Australia
Thomas G. Steenekamp

Managing Director - China
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Managing Director - South America
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February 19, 2025
File: 2755.102

CONSOL Energy Inc.
275 Technology Drive, Suite 101
Canonsburg, PA 15317-9565

Attention: Mr. Michael Bohan
Senior Geologist

Subject: Technical Report Summary
Coal Resources and Coal Reserves
Pennsylvania Mining Complex
Pennsylvania and West Virginia

Ladies and Gentlemen:

The John T. Boyd Company (BOYD) was retained by CONSOL Energy Inc. (recently renamed Core Natural Resources, Inc. and hereinafter "CONSOL") to complete an independent technical assessment of the coal resource and coal reserves estimates for the Pennsylvania Mining Complex (PAMC) as of December 31, 2024.

This technical report summary: 1) identifies and summarizes the scientific and technical information supporting the coal resource and coal reserves estimates for the PAMC and 2) provides BOYD's conclusions resulting from our independent assessment.

Respectfully submitted,

JOHN T. BOYD COMPANY

By:

John T. Boyd II
President and CEO

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JOHN T. BOYD COMPANY

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DISCLAIMERS AND QUALIFICATIONS

This report is intended for use by CONSOL subject to the terms and conditions of its professional services agreement with BOYD. The agreement permits CONSOL to file this report as a technical report summary with the U.S. Securities and Exchange Commission (SEC) pursuant to Subpart 1300 and Item 601(b)(96) of Regulation S-K. Except for the purposes legislated under US securities law, any other uses of or reliance on this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with CONSOL. The user of this document should ensure that this is the most recent disclosure of coal resources and coal reserves for the subject property as it is no longer valid if more recent estimates have been issued.

This report provides BOYD's assessment of CONSOL's coal resources and coal reserves as of December 31, 2024. Our assessment was performed to obtain reasonable assurance that CONSOL's estimates of coal reserves and coal resources are free from material misstatement. We did not independently estimate coal resources or coal reserves as it was not required for the purposes of the assessment. The Economic Analysis and resulting net present value (NPV) estimate in this report were made for the purposes of confirming the economic viability of the reported coal reserves and not for the purposes of valuing CONSOL or its assets. Internal Rate of Return (IRR) and project payback were not calculated, as there was no initial investment considered in the financial model.

The ability of CONSOL to recover all the reported coal reserves is dependent on numerous factors that are beyond the control of, and cannot be anticipated by, BOYD. These factors include mining and geologic conditions, the capabilities of management and employees, the securing of required approvals and permits in a timely manner, future coal prices, etc. Unforeseen changes in regulations could also impact performance. Opinions presented in this report apply to the site conditions and features as they existed at the time of BOYD's investigations and those reasonably foreseeable.

Cautionary Statements Regarding Forward-Looking Statements

Certain statements in this technical report summary are "forward-looking statements" within the meaning of the federal securities laws. Except for historical matters, the matters discussed in this technical report summary are forward-looking statements (as defined in Section 21E of the Securities Exchange Act of 1934, as amended) that involve risks and uncertainties that could cause actual results to differ materially from results

projected in or implied by such forward-looking statements. Accordingly, investors should not place undue reliance on forward-looking statements as a prediction of actual results. The forward-looking statements may include projections and estimates concerning the timing and success of specific projects and CONSOL's future production, revenues, income, and capital spending. When the words "anticipate," "believe," "could," "continue," "estimate," "expect," "intend," "may," "plan," "predict," "project," "should," "will," or their negatives, or other similar expressions are used in this technical report summary, the statements which include those words are usually forward-looking statements. Any expectations with respect to the PAMC or any other strategy that involves risks or uncertainties are forward-looking statements. These forward-looking statements are based on current expectations and assumptions about future events. While BOYD considers these expectations and assumptions to be reasonable, they are inherently subject to significant business, economic, competitive, regulatory, and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond BOYD's control. The forward-looking statements in this report speak only as of the date of this technical report summary and BOYD disclaims any intention or obligation to update publicly any forward-looking statements in this technical report summary, whether in response to new information, future events, or otherwise, except as required by applicable law.

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\$:	US dollar(s)
%	:	Percent or percentage
AFC	:	Armored Face Conveyor
As-Received Basis	:	Data or results are calculated to the moisture condition of the coal sample when it arrived at the testing facility.
ASTM	:	ASTM International (formerly American Society for Testing and Materials)
BMX	:	Bailey Mine Expansion
BOYD	:	John T. Boyd Company
Btu	:	British thermal unit. A unit of heat; it is defined as the amount of heat required to raise the temperature of one pound of water by one degree Fahrenheit.
CAPP	:	Central Appalachian Basin. Coal producing region consisting of Eastern Kentucky, Virginia, Southern West Virginia, and the Tennessee counties of: Anderson, Campbell, Claiborne, Cumberland, Fentress, Morgan, Overton, Pickett, Putnam, Roane, and Scott.
CM	:	Continuous Miner
CPP	:	Coal Preparation Plant
Coal	:	Combustible sedimentary rock in which organic matter, including residual moisture comprises more than 50% by weight and more than 70% by volume of carbonaceous material formed from altered plant remains.
Coal Reserve	:	An estimate of tonnage and grade or quality of indicated and measured coal resources that, in the opinion of the qualified person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a measured or indicated coal resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.

Coal Resource	:	A concentration or occurrence of coal of economic interest in or on the Earth's crust in such form, quality, and quantity that there are reasonable prospects for economic extraction. A coal resource is a reasonable estimate of mineralization, considering relevant factors such as cut-off grade, likely mining dimensions, location, or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.
CONSOL	:	CONSOL Energy Inc. and its subsidiaries
CRDA	:	Coal Refuse Disposal Area
CSX	:	CSX Corporation. A rail-based freight transportation company
CY	:	Cubic yards
DCF	:	Discounted Cash Flow
Dry Basis	:	Data or results are calculated to a theoretical base as if there were no moisture in the coal sample.
EIA	:	U.S. Energy Information Administration
FOB	:	Free-on-Board
ILB	:	Illinois Basin. Coal producing region consisting of Illinois, Indiana, and Western Kentucky.
Indicated Coal Resource	:	That part of a coal resource for which quantity and quality are estimated based on adequate geological evidence and sampling. The level of geological certainty associated with an indicated coal resource is sufficient to allow a qualified person to apply modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Because an indicated coal resource has a lower level of confidence than the level of confidence of a measured coal resource, an indicated coal resource may only be converted to a probable coal reserve.

Inferred Coal Resource	:	That part of a coal resource for which quantity and quality are estimated based on limited geological evidence and sampling. The level of geological uncertainty associated with an inferred coal resource is too high to apply relevant technical and economic factors likely to influence the prospects of economic extraction in a manner useful for evaluation of economic viability. Because an inferred coal resource has the lowest level of geological confidence of all coal resources, which prevents the application of the modifying factors in a manner useful for evaluation of economic viability, an inferred coal resource may not be considered when assessing the economic viability of a mining project, and may not be converted to a coal reserve.
IRR	:	Internal rate-of-return
ISO	:	International Organization for Standardization
lb	:	Pound
LOM	:	Life-of-Mine
LW	:	Longwall
MB	:	Miner-Bolter
Measured Coal Resource	:	That part of a coal resource for which quantity and quality are estimated based on conclusive geological evidence and sampling. The level of geological certainty associated with a measured coal resource is sufficient to allow a qualified person to apply modifying factors, as defined herein, in sufficient detail to support detailed mine planning and final evaluation of the economic viability of the deposit. Because a measured coal resource has a higher level of confidence than the level of confidence of either an indicated coal resource or an inferred coal resource, a measured coal resource may be converted to a proven coal reserve or to a probable coal reserve
Mineral Reserve	:	<i>See "Coal Reserve"</i>
Mineral Resource	:	<i>See "Coal Resource"</i>
MM	:	Million

Modifying Factors	:	The factors that a qualified person must apply to indicated and measured coal resources and then evaluate to establish the economic viability of coal reserves. A qualified person must apply and evaluate modifying factors to convert measured and indicated coal resources to proven and probable coal reserves. These factors include, but are not restricted to: mining; processing; infrastructure; economic; marketing; legal; environmental compliance; plans, negotiations, or agreements with local individuals or groups; and governmental factors. The number, type and specific characteristics of the modifying factors applied will necessarily be a function of and depend upon the mineral, mine, property, or project.
MSHA	:	Mine Safety and Health Administration. A division of the U.S. Department of Labor
NAPP	:	Northern Appalachian Basin. Coal producing region consisting of Maryland, Ohio, Pennsylvania, and Northern West Virginia
NAR	:	Net As Received
NS	:	Norfolk Southern Corporation. A rail-based freight transportation company.
NPV	:	Net Present Value
OSD	:	Out-of-Seam Dilution. Rock impurities recovered from above and below the coal seam with the coal seam during the normal mining process
PA-DEP	:	Pennsylvania Department of Environmental Protection
PAMC	:	Pennsylvania Mining Complex. Includes the Bailey Mine, the Enlow Fork Mine, the Harvey Mine, and the Central Coal Preparation Plant
Probable Coal Reserve	:	The economically mineable part of an indicated and, in some cases, a measured coal resource.
Production Stage Property	:	A property with material extraction of coal reserves.
Proven Coal Reserve	:	The economically mineable part of a measured coal resource which can only result from conversion of a measured coal resource.

QP	:	Qualified Person
Qualified Person	:	An individual who is: <ol style="list-style-type: none">1. A mineral industry professional with at least five years of relevant experience in the type of mineralization and type of deposit under consideration and in the specific type of activity that person is undertaking on behalf of the registrant; and2. An eligible member or licensee in good standing of a recognized professional organization at the time the technical report is prepared. For an organization to be a recognized professional organization, it must:<ol style="list-style-type: none">a. Be either:<ol style="list-style-type: none">i. An organization recognized within the mining industry as a reputable professional association; orii. A board authorized by U.S. federal, state, or foreign statute to regulate professionals in the mining, geoscience, or related field;b. Admit eligible members primarily based on their academic qualifications and experience;c. Establish and require compliance with professional standards of competence and ethics;d. Require or encourage continuing professional development;e. Have and apply disciplinary powers, including the power to suspend or expel a member regardless of where the member practices or resides; andf. Provide a public list of members in good standing.
ROM	:	Run-of-Mine. The as-mined material including coal, in-seam rock partings mined with the coal, and out-of-seam dilution.
RSA	:	Republic of South Africa
SGF	:	Specific gravity float
SEC	:	U.S. Securities and Exchange Commission
S-K 1300	:	Subpart 1300 and Item 601(b)(96) of the U.S. Securities and Exchange Commission's Regulation S-K
Ton	:	Short Ton. A unit of weight equal to 2,000 pounds

TPH : Tons per Hour

TPEH : Tons per Employee-Hour

WV-DEP : West Virginia Department of Environmental Protection

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JOHN T. BOYD COMPANY

1.0 EXECUTIVE SUMMARY

1.1 Introduction

CONSOL's Pennsylvania Mining Complex (PAMC) is a complex that includes three active underground longwall (LW) mines—Bailey Mine, Enlow Fork Mine, and Harvey Mine—and the Central Coal Preparation Plant (CPP). BOYD was retained by CONSOL to complete an independent technical assessment of coal resource and coal reserve estimates for the PAMC.

BOYD's findings as a result of the audit of PAMC's coal resource and coal reserve estimates are based on our detailed examination of the supporting geologic, technical, and economic information obtained from: (1) CONSOL files, (2) discussions with CONSOL personnel, (3) records on file with regulatory agencies, (4) public sources, and (5) nonconfidential BOYD files.

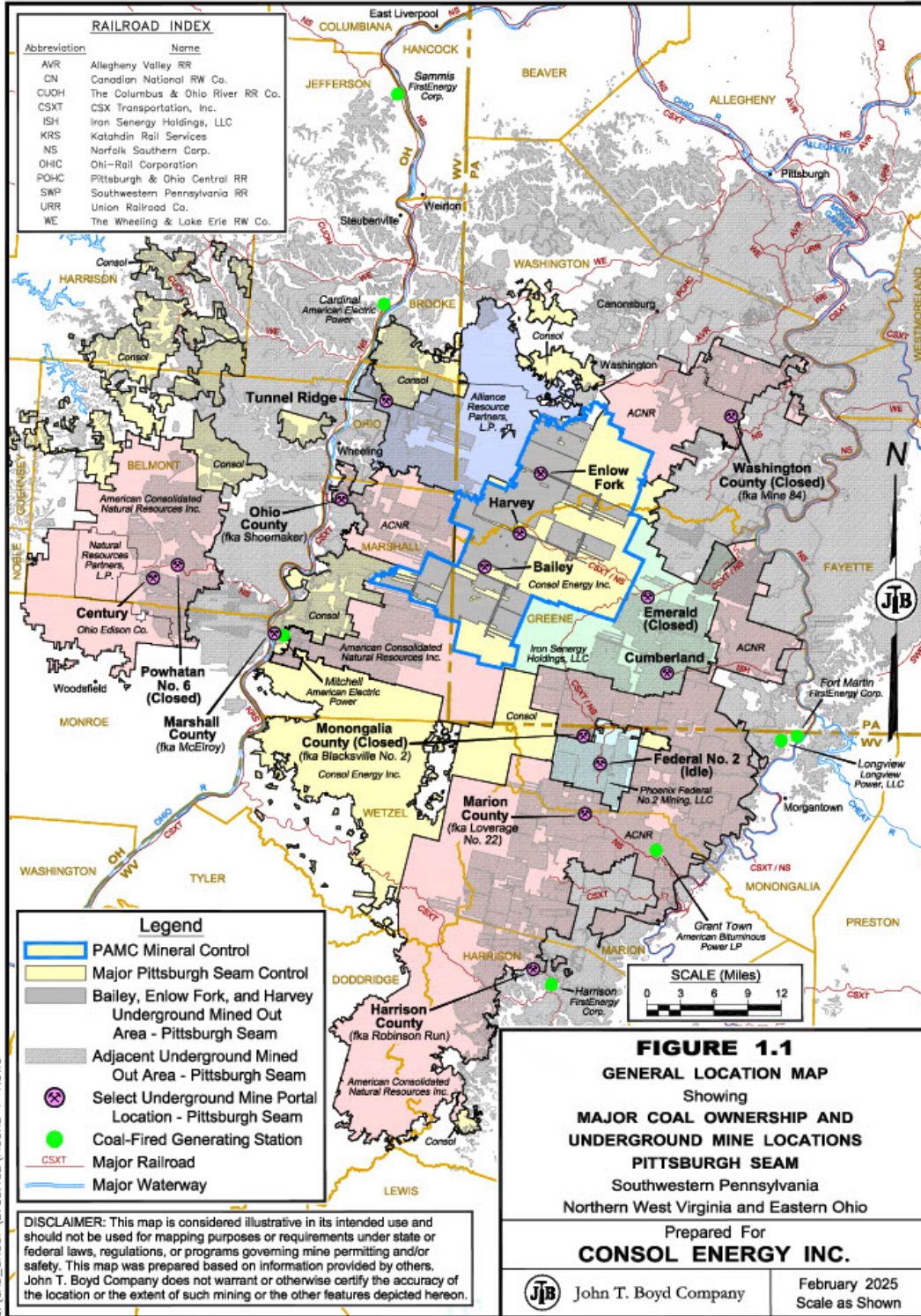
This technical report identifies and summarizes the results of our audit of the PAMC coal reserves and independent assessment of the economic viability of extracts of the PAMC coal reserves over the life of the mine and satisfies the requirements for CONSOL's disclosure of coal reserves set forth in Subpart 1300 and Item 601(b)(96) of the SEC's Regulation S-K (collectively, "S-K 1300"). This is the third technical report summary for the PAMC. BOYD is a qualified person as defined in S-K 1300.

Weights and measurements are expressed in US customary units. Unless otherwise noted, the effective date of the information, including estimates of coal reserves, is December 31, 2024.

1.2 Property Description

The PAMC is an active underground coal mining and processing operation located in Greene and Washington counties, Pennsylvania, and Marshall County, West Virginia. The general location of the PAMC is provided in Figure 1.1, following this page. The project lies in a well-developed region with a robust infrastructure.

The PAMC comprises approximately 179,028 acres—or 280 square miles—within the Northern Appalachian Basin (NAPP) coal-producing region of the eastern United States.



G:\CAD_GROUP\2755.102\FIGURE 1-1.DWG

The PAMC mines coal exclusively from the Pittsburgh Seam. Within the PAMC boundaries, CONSOL maintains the right to mine and remove almost all (approximately 99.2%) of the Pittsburgh Seam through whole or fractional mineral ownership and/or lease agreements. Several small adverse (uncontrolled) tracts exist within the proposed life-of-mine (LOM) plan; however, CONSOL has demonstrated success in acquiring these as required during the ordinary course of business, although there can be no assurance that it will be similarly successful in the future. BOYD is not aware of any encumbrances, litigation, or orders which would hinder continued development of the property.

As illustrated in Figure 1.1, the Pittsburgh Seam has historically been and continues to be extensively mined in and around the PAMC area. CONSOL has a lengthy history of successfully mining the Pittsburgh Seam and other coal beds in the region. CONSOL's involvement with the PAMC dates to the 1920s and it has been actively mining and developing the PAMC since 1984.

1.3 Geology

The PAMC is situated in the Allegheny Plateau of the NAPP coal fields region. Near-surface geology of this area primarily consists of Pennsylvanian and Lower Permian coal-bearing strata. Coal seams mined in this region are generally classified as high- to low-volatile bituminous, characterized by low-to-high sulfur content and high heating value.

The Pittsburgh Seam is the only coal seam of economic interest on the property. Structurally, the Pittsburgh Seam consists of three rather distinct and relatively consistent intervals: the main bench coal, an overlying draw slate, and a roof coal zone. With an average thickness of 5.5 ft, the main bench coal constitutes most of the mineable interval. The Pittsburgh Seam is relatively flat-lying, typically dipping less than one degree, and is located at depths ranging from approximately 300 ft to 1,400 ft below ground surface within the PAMC area.

The Pittsburgh Seam coal bed is characterized as a high-rank, high-volatile bituminous, medium-ash, and medium- to high-sulfur coal that is used for both thermal and metallurgical purposes.

1.4 Exploration

The Pittsburgh Seam has been extensively explored and mined in the region, with drilling records dating back to at least the 1920s. CONSOL provided data for 7,317 drill holes, totaling more than 4 million ft of drilling, that have intercepted the Pittsburgh Seam. Of these, results from 2,377 drill holes were utilized to define the lateral extent,

thickness, and qualities (both raw and clean) of the Pittsburgh Seam in the immediate PAMC project area.

BOYD's audit indicates that in general: (1) CONSOL has performed extensive drilling and sampling work on the subject property, (2) the work completed has been done by competent personnel, and (3) the amount of data available combined with wide-spread knowledge of the Pittsburgh Seam, is sufficient to confirm the thickness, lateral extents, and quality characteristics of the Pittsburgh Seam.

1.5 Coal Reserves

CONSOL's estimated underground mineable coal reserves for the PAMC total 557.6 million recoverable (clean) product tons remaining as of December 31, 2024. The coal reserves controlled by CONSOL are summarized in Table 1.1.

Table 1.1: Coal Reserves Summary

Mine	Product Tons (millions) by Classification		
	Proven	Probable	Total
Bailey	53.6	72.3	125.9
Enlow Fork	206.8	32.4	239.2
Harvey	101.1	91.4	192.5
Total	361.5	196.1	557.6

It is BOYD's opinion that extraction of the reported coal reserves is technically achievable and economically viable after the consideration of potentially material modifying factors. Periodic amendments to existing mining permits to add additional acreage (reserve tonnage) in order to sustain coal production is common practice. We are also not aware of any prohibition against the proposed mining and processing activities.

There are no reportable coal resources excluding those converted to coal reserves for the PAMC.

1.6 Operations

1.6.1 Mining

The PAMC is comprised of the Bailey, Enlow Fork, and Harvey underground mines. Each mine utilizes LW mining for primary production with supporting mine development performed by continuous miners (CM). This mining method is highly productive and commercially demonstrated; it has been the primary approach by coal mine operators to mine the Pittsburgh Seam for decades. PAMC has utilized this mining method since the inception of its mining operation in 1984. The complex is currently configured to operate multiple LW sections and has the ability to produce 28.5 million tons per year. The PAMC is generally considered an industry leader in terms of mining productivity and its mining costs are in the lower quartile when compared to its peers.

In the aggregate, the PAMC LOM plan projects the complex will produce approximately 1,003.4 million tons of run-of-mine (ROM) coal (557.6 million saleable tons after processing) over the expected life of the operations.

1.6.2 Processing

All coal mined from the three mines is directed to the Central CPP. The Central CPP serves as the coal washing facility for the PAMC's three LW mines. The plant was commissioned in 1984 to wash coal produced by the Bailey Mine. Since then, the Central CPP has undergone many expansions and has a current processing capacity of 8,200 raw tons-per-hour (TPH). It is the largest coal preparation plant in the United States.

The beneficiation process utilized at the PAMC has a proven record of accomplishment and has remained relatively unchanged for decades. Straightforward when compared to many other mineral processing techniques, the coal washing process is largely based on separating non-coal (rock) material from coal material by mechanically reducing the size of the feed and utilizing the materials' different densities to gravitationally separate one from the other. Largely, the process only requires water, magnetite, and frothing agents.

The plant's ability to blend raw coal production from the three underground mines into a singular plant feed allows for both more consistent plant operation and the ability to achieve a range of clean coal qualities for various coal markets.

1.6.3 Other Infrastructure

The PAMC is supported by several surface infrastructure sites. Major surface infrastructure includes ancillary buildings, high-voltage power distribution stations, ROM over-land coal conveyor belts, CPP refuse facilities, underground access and ventilation structures, and rail loading systems.

Product coal from the PAMC is transported to its customer base via rail. The Central CPP is served by both the Norfolk Southern (NS) and CSX railroads via a rail spur that connects the complex with the mainline rail at Waynesburg, Pennsylvania.

The Bailey refuse facility serves as the disposal location for all waste rock (coarse coal refuse) and fine coal slurry (fine coal refuse) produced during the processing of coal.

1.7 Financial Analysis

1.7.1 Market Analysis

The PAMC produces a thermal coal that is sold into the domestic United States and international export markets. The high calorific value thermal coal produced by PAMC is currently used in the United States by electricity generators located in the PJM Interconnection, Southeast, and Midcontinent Independent System Operator regional electricity markets and by domestic industrial customers. In addition to the domestic market, PAMC also services international power generation and industrial customers in Europe, Africa, Asia, and other parts of North America. The coal's high quality enables it to receive premium pricing relative to regional price indices.

The PAMC also supplies lesser quantities—approximately 2.0 to 3.0 million tons per annum—of a secondary metallurgical coal product into Asia, Europe, and South America.

1.7.2 Capital and Operating Cost Estimates

The Pittsburgh Seam is widely recognized as being ideally suited for LW mining operations and conducive to efficient, low-cost production operations. In terms of total dollars expended per year, cash operating costs for LW mines are mostly fixed. Unit costs, therefore, will vary mostly due to changes in production and less so with regard to general inflation and major mine site changes.

During the historical review period of 2020–2024, total annual cash operating costs for the PAMC were within the range of \$28 to \$40 per saleable ton. Operating cost estimates were developed based on recent actual costs and considering site specific operational activity levels and cost drivers. PAMC's operating costs are expected to

remain relatively consistent (on an uninflated basis) with 2024 results. As such, the projected total cash cost of goods sold averages approximately \$35.50 per ton sold over the life of the mine. As the operations are in a steady state, BOYD considers the future operating cost estimates to be reasonable and appropriate.

The PAMC is regarded as being highly capitalized and comprising of state-of-the-art operations when compared to industry peers. Continual capital expenditures have been ongoing by CONSOL in recent years to support mine infrastructure expansions, maintenance of production equipment, refuse placement, etc. BOYD projected sustaining capital expenditures is estimated to average approximately \$6.00 per ton sold, which includes maintenance of production equipment as well as other items needed for the ongoing operation. This unit cost is based on our judgment and experience with similar operations.

1.7.3 Economic Analysis

BOYD independently evaluated the economics of the PAMC over the forecasted life of the project. The results of our indicative economic analysis for PAMC over the remaining life of the operations (2025 to 2061) shows an after-tax net present value (NPV) of almost \$2.7 billion for the expected case at a 12% discount rate. The cash flow estimates are positive even after performing independent sensitivity analyses of up to 10% variation in sales price. From this we conclude that the stated coal reserves are economically viable under reasonable market price expectations for the coal produced from the PAMC.

The NPV estimate was made for purposes of confirming the economic viability of the reported coal reserves and not for purposes of valuing CONSOL or its assets. IRR and project payback were not calculated, as there was no initial investment considered in the financial model.

1.8 Permitting Requirements

Numerous permits are required by federal and state law for underground mining, coal preparation and related facilities, and other incidental activities. CONSOL reports that necessary permits to support current operations are in place or pending approval. New permits or permit revisions may be necessary from time to time to facilitate future operations. Given sufficient time and planning, CONSOL should be able to secure new permits, as required, to maintain its planned operations within the context of the current regulations.

Permits generally require that CONSOL post a performance bond in an amount established by the regulator program to: (1) provide assurance that any disturbance or liability created during mining operation is properly mitigated, and (2) assure that all regulatory requirements of the permit are fully satisfied. As of December 31, 2024, CONSOL held more than \$380 million in surety bonds to cover its obligations relating to mining and reclamation, mine subsidence, stream restoration, water loss, and dam safety.

Periodic amendments to existing mining permits to add additional acreage (reserve tonnage) in order to sustain coal production are common practice. We are not aware of any issues which would impact or prevent the present "Not Permitted" reserves to be permitted as future mining needs dictate. We are also not aware of any prohibition against the proposed mining and processing activities.

1.9 Conclusions

It is BOYD's overall conclusion that CONSOL's estimates of coal reserves, as reported herein: (1) were prepared in conformance with accepted industry standards and practices, and (2) are reasonably and appropriately supported by technical evaluations, which consider all relevant modifying factors.

Given the lengthy operating history and status of evolution, residual uncertainty for this project is considered minor under the current and foreseeable operating environment. A general assessment of risk is presented in the relevant sections of this report.

It is BOYD's opinion that extraction of the PAMC's reported coal reserves is technically achievable and economically viable after the consideration of potentially material modifying factors. The ability of CONSOL, or any mine operator, to recover all of the reported coal reserves is dependent on numerous factors that are beyond the control of, and cannot be anticipated by, BOYD. These factors include mining and geologic conditions, the capabilities of management and employees, the securing of required approvals and permits in a timely manner, future coal prices, etc. Unforeseen changes in regulations could also impact performance.

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2.0 INTRODUCTION

2.1 Registrant

CONSOL is a US-based mining company headquartered in Canonsburg, Pennsylvania whose common stock is listed on the New York stock exchange (NYSE:CEIX). CONSOL is actively engaged in the production and export of thermal coal and metallurgical coal from the PAMC. The company also operates a mine in Wyoming County, West Virginia that produces metallurgical coal. In addition, CONSOL controls considerable greenfield (i.e., undeveloped) thermal and metallurgical coal resources located in the major coal-producing basins of the eastern United States. The company also owns and operates the CONSOL Marine Terminal, which is in the Port of Baltimore, Maryland. Additional information regarding CONSOL can be found at www.consolenergy.com.

This technical report summary was prepared for CONSOL in support of their disclosure of coal resources and coal reserves for the PAMC.

2.2 Terms of Reference and Purpose

CONSOL retained BOYD to complete an independent assessment of CONSOL's internally-prepared coal resource and coal reserve estimates and supporting information for the PAMC. CONSOL also retained BOYD to perform an independent assessment of the economic viability of the PAMC coal reserves over the life of the operation. Our objective was to review and evaluate the scientific and technical information on which CONSOL's calculation of its coal resources and coal reserve estimates are based and also to evaluate whether the extraction of the coal resources and coal reserves is economically viable over the life of the PAMC.

The technical summary of our third-party assessment, presented in report form herein, was prepared in accordance with the disclosure requirements set forth in S-K 1300. The purpose of this report is: (1) to summarize technical and scientific information for the subject mining properties, (2) to provide the conclusions of our technical audit, (3) to provide a statement of coal resources and/or coal reserves for the PAMC, and (4) provide our conclusion of the economic viability of the PAMC's coal reserves.

BOYD's findings are based on our detailed examination of the supporting geologic and other scientific, technical, and economic information provided by CONSOL, as well as our assessment of the methodology and practices applied by CONSOL in formulating

the estimates of coal resources and coal reserves disclosed in this report. We did not independently estimate coal resources or coal reserves from first principles.

We used standard engineering and geoscience methods, or a combination of methods, that we considered to be appropriate and necessary to establish the conclusions set forth herein. As in all aspects of mining property evaluation, there are uncertainties inherent in the interpretation of engineering and geoscience data; therefore, our conclusions necessarily represent only informed professional judgment.

This report is intended for use by CONSOL subject to the terms and conditions of its professional services agreement with BOYD. We also consent to CONSOL filing this report as a technical report summary with the SEC pursuant to Subpart 1300 and Item 601(b)(96) of Regulation S-K.

2.3 Expert Qualifications

BOYD is an independent consulting firm specializing in mining-related engineering and financial consulting services. Since 1943, BOYD has completed over 4,000 projects in the United States and more than 60 other countries. Our full-time staff comprises mining experts in: civil, environmental, geotechnical, and mining engineering; geology; mineral economics; and market analysis. Our extensive experience in coal resources/reserve estimation and our knowledge of the subject coal properties provide BOYD with an informed basis on which to opine on the reasonableness of the estimates provided by CONSOL. An overview of BOYD can be found on our website at www.jtboyd.com.

The individuals primarily responsible for this audit and the preparation of this report are, by virtue of their education, experience, and professional association, considered qualified persons as defined in S-K 1300.

Neither BOYD nor its staff employed in the preparation of this report have any beneficial interest in CONSOL, and are not insiders, associates, or affiliates of CONSOL. The results of our audit were not dependent upon any prior agreements concerning the conclusions to be reached, nor were there any undisclosed understandings concerning any future business dealings between CONSOL and BOYD. This report was prepared in return for fees based upon agreed commercial rates, and the payment for our services was not contingent upon our opinions regarding the project or approval of our work by CONSOL and its representatives.

2.4 Sources of Information

Information used in this assignment was obtained from: (1) CONSOL files, (2) existing BOYD work files and reports, (3) discussions with CONSOL personnel, (4) records on file with regulatory agencies, (5) public sources, and (6) nonconfidential information in BOYD's possession.

The following information was provided by CONSOL:

- Year-end reserve statements and reports for 2024.
- Exploration records (e.g., drilling logs, lab sheets).
- Geologic databases of lithology and coal quality.
- Computerized geologic models.
- Mapping data, with:
 - Mineral tenure boundaries.
 - Permit boundaries.
 - Limits of previous mining.
- Mine plans, production schedules, financial forecasts and supporting documentation.
- Historical information, including:
 - Production reports and reconciliation statements.
 - Financial statements.
 - Product sales and pricing.

Information from sources external to BOYD and/or CONSOL are referenced accordingly.

The data and work papers used in the preparation of this report are on file in our offices.

2.5 Personal Inspections

Although an inspection of the PAMC properties was not conducted as part of this study, BOYD has well-established knowledge of the subject mining operations having performed over 100 engineering studies on the Pittsburgh coal seam, including the PAMC and adjacent properties. BOYD's most recent visits to the PAMC operations were in July/August 2021 and May 2023.

2.6 Report Version

The effective (i.e., "as of") date of the report is December 31, 2024. Unless otherwise noted, the estimates of coal resources and coal reserves and supporting information presented in this report are effective as of December 31, 2024.

This is the third technical report summary filed by CONSOL for the PAMC and supersedes the following previously filed reports:

John T. Boyd Company; February 2022; Technical Report Summary, Coal Resources and Coal Reserves, Pennsylvania Mining Complex, Pennsylvania and West Virginia (Report No. 2755.080).

John T. Boyd Company; January 2023; Technical Report Summary, Coal Resources and Coal Reserves, Pennsylvania Mining Complex, Pennsylvania and West Virginia (Report No. 2755.091).

The user of this document should ensure that this is the most recent disclosure of coal resources and coal reserves for the PAMC as it is no longer valid if more recent estimates have been issued.

2.7 Units of Measure

The US customary measurement system has been used throughout this report. Tons are short tons of 2,000 pounds-mass. Unless otherwise stated, all currency is expressed in US Dollars (\$). Historic prices and costs are presented in nominal (i.e., unadjusted for inflation) dollars. Future dollar values are expressed on a constant (i.e., not escalated) basis as of the effective date of this report.

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3.0 PROPERTY DESCRIPTION

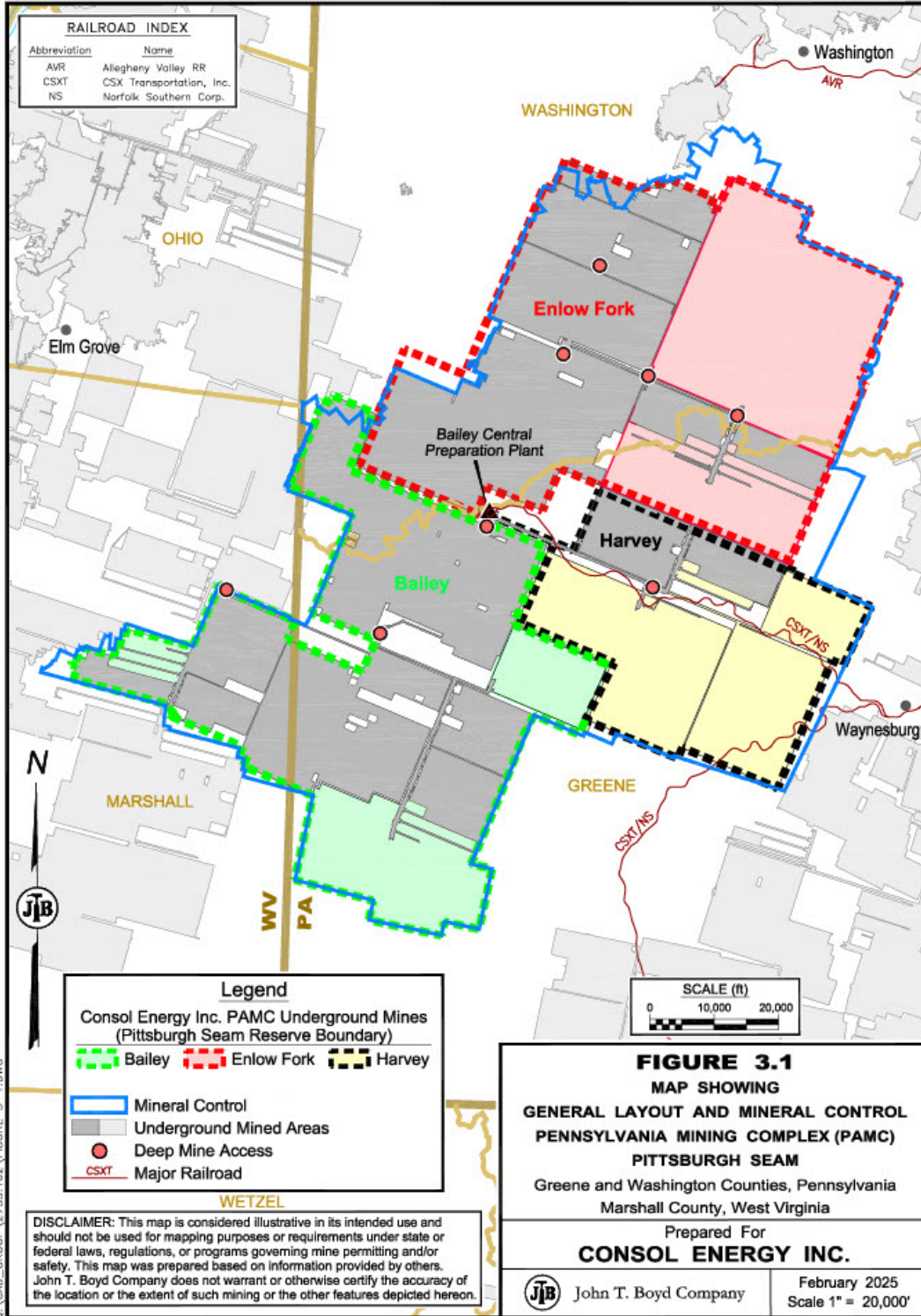
3.1 Property Location

The PAMC is a coal mining and processing operation located in Greene and Washington counties, Pennsylvania, and Marshall County, West Virginia. The PAMC comprises almost 280 square miles within the NAPP coal-producing region of the eastern United States. The PAMC operations currently consist of three active underground mines—Bailey, Enlow Fork, and Harvey—and related infrastructure.

The PAMC is commercially operated as a single entity, although each of the three mines operate under a unique Mine Safety and Health Administration (MSHA) mine identification number and has a separate direct management team. All mine output is delivered by belt conveyors to a central coal processing facility, the Central Preparation Plant, that is the largest in the country (8,200 raw tons per hour) and reports to MSHA under the Bailey Mine identification number. The ROM coal is segregated by mine, and sophisticated analysis and processing systems are utilized to meet customer specifications. Plant reject-material reports to the coarse and fine refuse disposal facilities. Saleable output is shipped to a diverse customer base via the rail load-out on a dedicated rail spur serviced by NS and CSX.

The PAMC is located approximately 26 miles southwest of Pittsburgh, near the city of Washington and the borough of Waynesburg, all in Pennsylvania. The city of Wheeling, West Virginia lies about 12 miles due west and the city of Morgantown, West Virginia, is located approximately 22 miles southeast. The project area is flanked by Interstate 70 to the northwest and Interstate 79 to the east. US Route 250 intersects the south-west corner of the property.

Geographically, the Central Preparation Plant is located at approximately 39°58'23.7" N latitude and 80°24'43.6" W longitude. Figures 1.1 (page 1-2) and 3.1, following this page, illustrate the location and general layout of the PAMC.



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3.2 Property Control

Within the PAMC area, CONSOL controls approximately 179,028 acres of mineral and/or surface rights. This control exists as a complex collection of 2,757 owned and/or leased tracts that range from less than an acre to several hundred acres in size. Ownership of the surface rights and the mineral rights is often severed for the properties and the estates are often fractional, in which mineral rights are split between several owners. CONSOL and its predecessors have acquired the necessary rights to support development and operations through purchase or lease agreements with predominantly private owners or entities.

As it is outside the scope of our expertise, BOYD has not independently verified ownership of the PAMC area and the underlying property agreements. Ownership data including maps, deeds, lease agreements, and royalty rate furnished to us have been accepted as being true and accurate for the purpose of this report.

3.2.1 Coal Control

CONSOL maintains the right to mine and remove almost all of the Pittsburgh Seam within the PAMC boundaries through whole or fractional mineral ownership and/or lease agreements. CONSOL's coal control is summarized in Table 3.1.

Table 3.1: Summary of Mineral (Coal) Control

Control Type	Designated PAMC Area		Planned Mining Areas	
	Acres	%	Acres	%
Owned	140,643	78.6	77,090	93.0
Leased	37,453	20.9	5,191	6.2
Adverse	932	0.5	632	0.8
Total	179,028	100.0	82,913	100.0

The 2,757 tracts of the PAMC are covered by numerous coal deeds and coal lease agreements. Lease terms generally extend until all the coal is removed from the subject tract. Where applicable, royalty rates typically range from 3% to 8% of the gross sales price of the coal.

As shown in Table 3.1, almost all the Pittsburgh Seam coal (on an acreage basis) is controlled by CONSOL within the PAMC area (99.5%) and covering the planned mining areas (99.2%). Small adverse (uncontrolled) tracts within the project limits are common; however, we believe it is generally reasonable to assume that such tracts can be acquired or leased in the ordinary course of business. It is BOYD's opinion that adverse

coal control does not pose a material risk to the estimate of coal reserves reported herein.

3.2.2 Surface Ownership

As part of the PAMC, CONSOL controls surface rights to approximately 24,092 acres through fee simple ownership. This includes ownership of the property upon which the surface facilities for mine access, processing, storing, and shipping are located, as well as 3,509 permitted acres for coarse and fine refuse disposal facilities.

CONSOL reports it controls adequate surface rights to sustain current mining operations in the near term. Additional surface property will likely be required during the life of the mine for the placement of additional infrastructure. It is generally reasonable to assume the required property can be acquired or leased in the ordinary course of business; as such, we do not believe there is any undue risk associated with surface ownership to the estimated reserves reported herein.

3.3 Regulation and Liabilities

Mining and related support activities on the PAMC properties are subject to various federal, state, and local environmental regulations. The more significant federal laws include:

- Clean Air Act
- Clean Water Act
- Surface Mining Control and Reclamation Act
- Endangered Species Act
- National Environmental Policy Act
- Comprehensive Environmental Response, Compensation, and Liability Act
- Resource Conservation and Recovery Act

In Pennsylvania and West Virginia, responsibility for enforcing these acts, with the aid of numerous state laws and legislative rules, lies with the Pennsylvania Department of Environmental Protection (PA-DEP) and West Virginia Department of Environmental Protection (WV-DEP) and their various subdivisions, respectively

Operations on the PAMC properties must comply with other state, federal, and local environmental laws in addition to those listed above. These laws include, for example, the Safe Drinking Water Act, the Emergency Planning and Community Right to Know Act, the Toxic Release Inventory, and the rules governing the use and storage of

explosives regulated by the U.S. Bureau of Alcohol, Tobacco, and Firearms and the Department of Homeland Security.

As mandated by these laws and regulations, numerous permits are required for underground mining, coal preparation and related facilities, and other incidental activities. CONSOL reports that necessary permits are in place or applied for to support current operations. New permits or permit revisions may be necessary from time to time to facilitate future operations. Given sufficient time and planning, we believe CONSOL should be able to secure new permits, as required, to maintain its planned operations within the context of the current regulations.

Permits generally require that the permittee post a performance bond in an amount established by the regulator program to: (1) provide assurance that any disturbance or liability created during mining operation is properly mitigated, and (2) assure that all regulatory requirements of the permit are fully satisfied. CONSOL reports holding almost \$355 million in surety bonds to cover its obligations relating to mining and reclamation, mine subsidence, stream restoration, water loss, and dam safety.

Regular inspection of the mines and related facilities are conducted by the U.S. Department of Labor's Mine Safety and Health Administration (MSHA) for health and safety compliance. On finding any violation of a health or safety standard, an inspector will issue a citation that specifies the standard violated and evaluates the gravity of the violation by several factors, including likelihood of injury. Any infraction that is reasonably likely to result in a serious injury or illness or is caused by the operator's unwarrantable failure to comply with regulatory requirements will carry additional fines and could result in temporary closure. Typically, the civil penalties for regular assessments are not considered material.

BOYD is not aware of any prohibition of mining and processing activities for the PAMC. However, the reported coal reserves may be materially impacted by: CONSOL's failure to comply with permit conditions and rules; delays in obtaining required government or other regulatory approvals or permits; CONSOL's inability to obtain such required approvals or permits; or changes in governmental regulations.

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4.0 PHYSIOGRAPHY, ACCESSIBILITY, AND INFRASTRUCTURE

4.1 Topography, Elevation, and Vegetation

The PAMC lies within the Waynesburg Hills Section of the Appalachian Plateaus physiographic province of Pennsylvania. This region is characterized by very hilly topography, with narrow hilltops and dendritic valleys which display steeply sloping hillsides and moderate relief. Surface elevations within the PAMC area range from approximately 860 ft to 1,580 ft above mean sea-level. There is a vast network of overlying streams and waterways which cover the complex area.

Land cover within the PAMC area consists predominantly of mixed forest and crop/pastureland dotted with medium- to low-density (rural) residential areas.

4.2 Accessibility

General access to the PAMC is via a well-developed network of primary and secondary roads serviced by state and local governments. These roads offer direct access to the mine and processing facilities and are generally open year-round. In addition, PAMC is supported by Class 1 railroads to transport processed coal products to various markets/consumers.

4.3 Climate

Climate in and around the PAMC is typical of southwestern Pennsylvania, with four distinct seasons: cold winters; hot and humid summers; and mild falls and springs. The average daily high temperatures are above freezing 12 months of year while the low temperatures drop below freezing 5 months of the year. Table 4.1 provides monthly average climate data collected from 2000 through 2024 in Waynesburg, Pennsylvania.

Table 4.1: Monthly Average Climate Data, Waynesburg, PA

Average	Unit	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High Temp	[F	38	42	51	63	72	80	83	82	76	65	54	42
Low Temp	[F	19	20	27	26	46	55	60	58	50	38	30	23
Precipitation	inches	3.0	2.6	3.7	3.1	4.4	3.7	4.2	3.7	3.2	2.8	3.4	2.9
	days	15	14	13	13	15	14	12	11	10	12	12	14
Snowfall	inches	9.0	8.0	5.0	1.0	-	-	-	-	-	-	1.0	5.0
	days	8	7	3	1	-	-	-	-	-	-	1	5

Source: National Oceanic and Atmospheric Administration

In general, the operating season for the PAMC is year-round. Adverse weather conditions seldom limit the PAMC coal mining, processing, and loading operations; however, extreme weather conditions may temporarily impact operations.

4.4 Infrastructure Availability and Sources

The PAMC lies within a well-developed region of southwestern Pennsylvania, with an extensive history related not only to coal mining, processing, and transportation, but also many other industries and services. A reported 3.1 million people live within 60 miles of the PAMC, according to the U.S. Census of 2010.

Coal produced at the PAMC is transported primarily by rail. A rail load-out facility and dedicated rail spur—19.3 miles of track that includes three side tracks—facilitate transportation of the coal on the NS and CSX railroads.

Several regional airports are located near the PAMC, and the Pittsburgh International Airport is located approximately 25 miles north of the complex.

Sources of electrical power, water, supplies, and materials are readily available. Electrical power is provided to the mines and facilities by regional utility companies. Water is supplied by public water services, surface impoundments, or water wells.

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5.0 HISTORY

5.1 Reserve Acquisition

CONSOL's involvement with the PAMC dates to the 1920s with the acquisition of certain coal leases by its forebearer. As shown in Table 5.1, CONSOL has actively acquired additional coal properties to expand the PAMC to its current size.

Table 5.1: Historical Reserve Acquisition

Reserve Area	Acquisition Year	Reported Reserves (million tons)
Ninevah	Prior to 1965	262
Manor	1977	209
Alexander	1981	93
Berkshire	1985	174
Chevron-Penn Central	1993	92
Green Hill	1995	220
Alliance, Drummond, and Mine 84	1996–2015	208
Greene Manor/CNG	2022	73

Note: "Reported Reserves" are historical estimates. A qualified person has not done sufficient work to classify historical estimates as current coal resources or coal reserves and the issuer is not treating the historical estimate as current coal resources or coal reserves.

Despite a lengthy ownership history, commercial production on the property did not begin until 1984.

5.2 Mine Development

The Bailey Mine is the first mine that CONSOL developed at the PAMC. Construction of the slope and initial air shaft began in 1982. Following development of the slope and shaft, commercial coal production began in 1984. LW mining production commenced in the mid-1980s. In 2010, a new slope and overland belt system was commissioned, which allowed a large percentage of the Bailey Mine to be sealed off. The current workings are situated in the southwestern portion of the PAMC area.

Construction of the Enlow Fork Mine, which is located directly north of the Bailey Mine, began in 1989. Initial underground development was started from the Bailey Mine while the Enlow Fork slope was being constructed. Once the slope bottom was developed and the slope belt became operational, seals were constructed to separate the two mines. LW mining production commenced in 1991 with the second LW coming online in 1992. In

2014, a new slope and overland belt system was commissioned and a substantial portion of the Enlow Fork Mine was sealed. The current workings are situated in the northern-most portion of the PAMC area.

In 2009, the Bailey Mine Expansion (BMX) project was initiated to develop reserves to the east of the original Bailey Mine portal. The project utilized the original Bailey Mine slope and airshaft/portal, which required an extensive underground sealing project to isolate the bottom area from the rest of the soon-to-be-sealed old works at the Bailey Mine. An extended underground corridor was developed between the Bailey and Enlow Fork Mine workings to a new shaft and portal facility. Construction of the supporting surface facilities commenced in 2011. In 2014, the BMX project was completely severed from Bailey Mine; a new MSHA identification number was issued and the mine was renamed as the Harvey Mine. LW mining production commenced in March 2014.

In 2022, CONSOL executed several coal reserve transactions with coal mining companies with active operations adjacent to the PAMC. The effect of this exchange has been reflected in the estimate of coal reserves provided in Chapter 12.

There are no significant Pittsburgh Seam mining activities known to have occurred within the PAMC bounds preceding CONSOL's development of the property.

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6.0 GEOLOGICAL SETTING, MINERALIZATION, AND DEPOSIT

6.1 Regional Geology

The PAMC is located within the Appalachian Basin, an oblong synclinal, sedimentary basin which extends from central Alabama to central New York State. The Appalachian Basin spans an area of about 185,000 square miles, with a length of around 1,075 miles, consisting of Paleozoic sedimentary rocks, dating from the Early Cambrian through the Early Permian periods.

The Appalachian Basin has informally been subdivided into three coal regions—the northern, central, and southern Appalachian Basin coal regions—based on characteristics of the sediments and the coals that are found there. The three coal regions contain both formal and informal coal fields. Physiographically, the Appalachian Basin is divided into four distinct provinces, which from east to west are: the Piedmont, the Blue Ridge, the Valley and Ridge, and the Appalachian Plateaus. The PAMC is located within the NAPP basin coal region of the Appalachian Plateaus province. This region is known to contain much of the coal, oil, and shale gas resources of the eastern United States.

The Allegheny Plateau, in which the PAMC is located, is a major part of the Appalachian Plateaus province, underlain by essentially flat-lying strata, predominately of Mississippian and Pennsylvanian age. Throughout the region, the strata of the Allegheny Plateau have been broadly uplifted and, in some areas, broadly folded as well, but in general these bedrock units are only minimally deformed.

A large portion of the Allegheny Plateau consists of a coalfield comprising Pennsylvanian and Lower Permian coal-bearing strata and include, in depositional order, bedrock of the Pottsville, Allegheny, Conemaugh, Monongahela, and Dunkard groups. These coal-bearing formations contain approximately two-fifths of the nation's bituminous coal deposits. In some portions, the coalfield contains over 60 coal seams of varying economic significance. Seams are typically between 1 ft and 6 ft in thickness, with relatively little structural deformation. Coal in the region is classified as high- to low-volatile bituminous with rank increasing to the east. Coals are typically characterized as low to high sulfur and high heating value.

6.2 Local Stratigraphy

Pennsylvanian and Permian sedimentary strata comprise the uppermost stratigraphic units in and around the PAMC. These units primarily include bedrock of, in ascending stratigraphic order, the Conemaugh and Monongahela Groups of the Pennsylvanian Series, and the Permian Dunkard Group.

The strata of the Pennsylvanian and Permian systems locally are predominantly clastic and contain subordinate amounts of coal and limestone. The Pittsburgh coal seam is the basal member of the Monongahela Group. The stratigraphic relationship between these groups is presented in Figure 6.1 as follows.

System	Group	Formation
Permian	Dunkard	Green
		Washington
		Waynesburg
Pennsylvanian	Monongahela	Uniontown
		Pittsburgh
	Conemaugh	Casselman
		Glenshaw
	Allegheny	
	Pottsville	

Figure 6.1
Generalized Stratigraphic Chart,
Southwestern Pennsylvania

6.2.1 Conemaugh Group

The Conemaugh Group is characterized by sequences of red and green mudstone, claystone, and siltstone. Extending from the top of the Upper Freeport Coal to the base of the Pittsburgh Coal, it ranges in thickness from about 400 ft to 850 ft. The Conemaugh Group contains several thin marine limestone beds but only a few thin coal beds. The Conemaugh Group is divided into the Glenshaw and Casselman formations at the top of the regionally persistent Ames limestone. The bituminous coal beds present in the unit are impure and considered to be of limited-to-no economic value.

6.2.2 Monongahela Group

The Monongahela Group extends from the base of the Pittsburgh Coal to the base of the Waynesburg Coal. The unit is divided into the Pittsburgh and Uniontown formations at the base of the Uniontown Coal. The Monongahela Group is a sedimentary sequence of non-marine rocks (sandstone, siltstone, red and gray shale, dolomitic limestone, and coal) ranging in thickness from approximately 250 ft to 400 ft. Regionally, the Monongahela Group contains several commercial coal beds, including the Pittsburgh, Redstone, Sewickley, and Uniontown; however, within the vicinity of the PAMC, only the Pittsburgh coal seam is of economic interest. The Pittsburgh coal seam is unusually uniform in continuity and thickness for a coal seam in western Pennsylvania, and covers thousands of square miles.

6.2.3 Dunkard Group

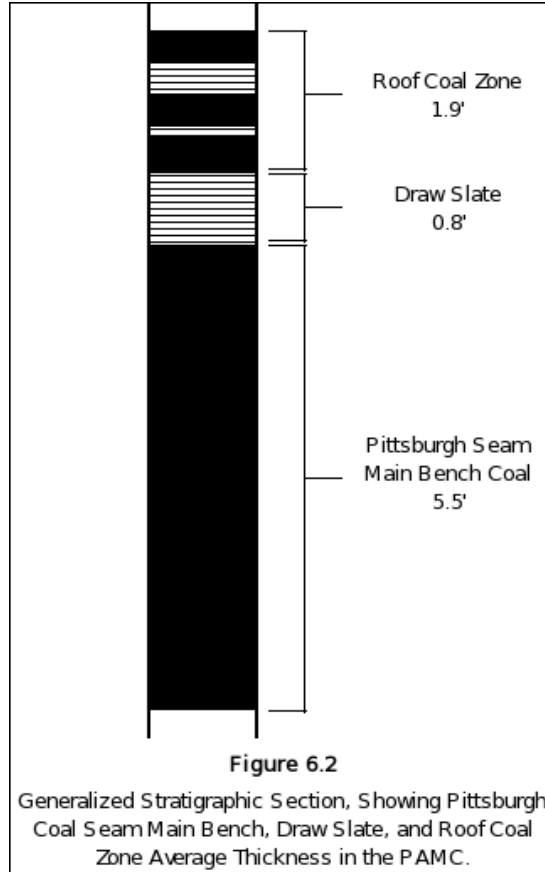
The Dunkard Group includes all strata above the base of the Waynesburg coal bed. It is made up of Waynesburg, Washington, and Greene formations. The Dunkard Group reaches a maximum thickness of about 1,100 ft in Greene County and the upper surface is the modern-day erosional surface. Strata of the group are very similar to those of the underlying Monongahela Group, except that the Dunkard Group contains only thin discontinuous coal beds of little or no commercial value.

6.3 Coal Seam Geology

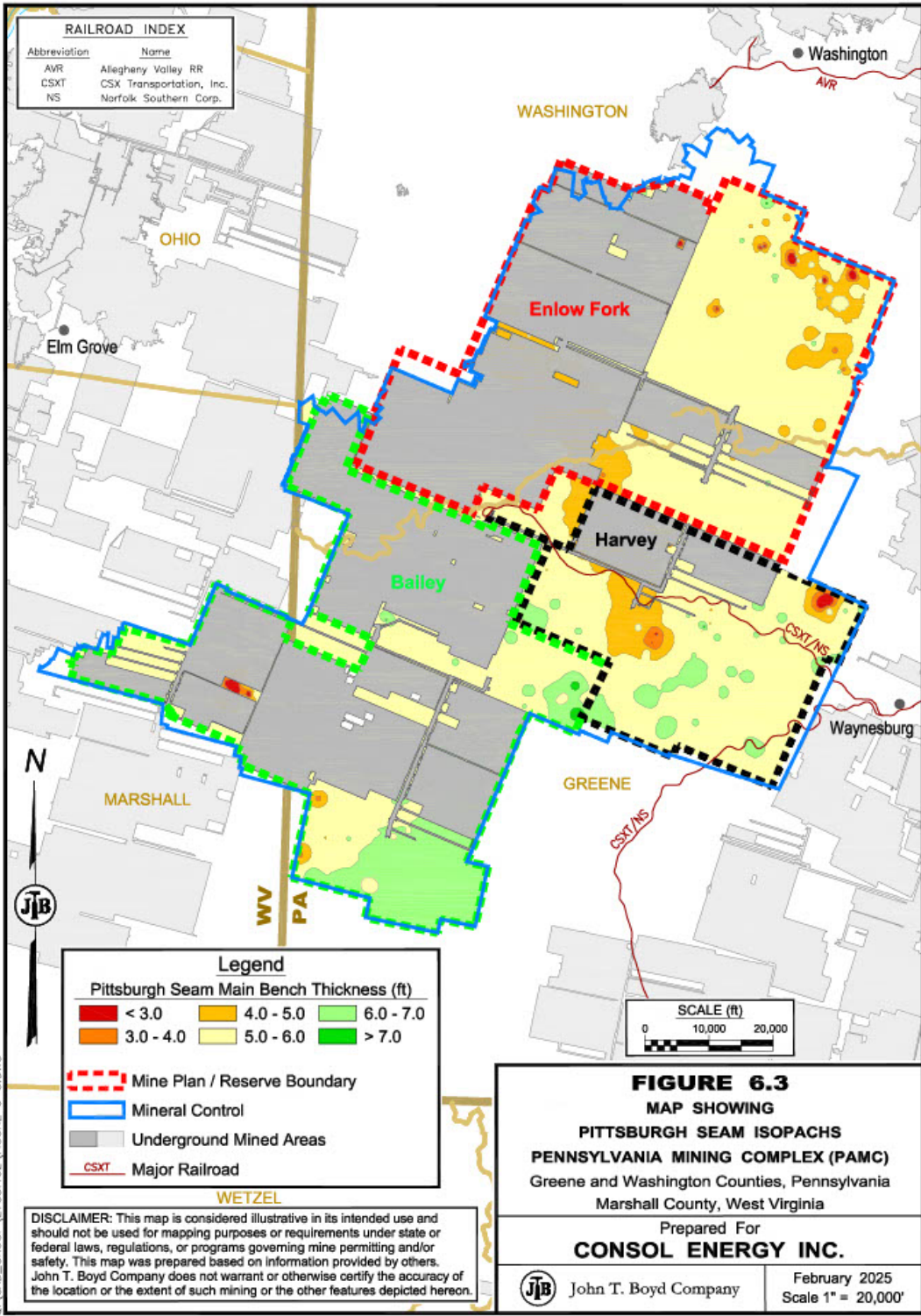
The Pittsburgh Seam is the only coal seam of economic interest within the PAMC. The Pittsburgh Seam is very uniform in depositional nature and continuity throughout much of the surrounding region, with a lengthy history of economically viable mining operations being very well documented.

6.3.1 Lithology

The Pittsburgh Seam coal bed is composed of three distinct and relatively consistent intervals, in order of deposition being the thick “main bench” coal, an overlying “draw slate”, and one or more “roof coal” zones. Mining methods employed at the PAMC generally necessitate extraction of the first (lowermost) roof coal zone, along with the draw slate and main bench coal. Figure 6.2 illustrates the various intervals of the Pittsburgh Seam coal bed.



The main bench coal thickness across the PAMC area is generally between the 5.0 ft to 6.0 ft range, averaging 5.5 ft over most of the mine plan area. Isolated pockets of both thinner and thicker coal do exist, and extreme but generally isolated occurrences may range from below 1 ft to above 11 ft thick. Figure 6.3, following this page, provides a map of the Pittsburgh Seam main bench thickness. The locations of thinner coal occurrences are generally well-defined by the extensive exploration performed in and around the study area, and mine plans have been developed to avoid these low coal occurrences.



G:\CAD_GROUP\2755.102\FIGURE_6-3.DWG

The draw slate is a prominent, laterally persistent shale parting that immediately overlies the main bench coal. Thickness generally ranges from 0 to 2.0 ft, averaging less than 1.0 ft across much of the PAMC area. Isolated drilling within the study area have recorded instances of the draw slate being over 4-ft thick.

The roof coals tend to be of lesser quality when compared to the main bench coal, as well as being highly inconsistent in depositional nature. In some areas the roof coal may be completely absent; present as a solid interval of relatively thick coal; or split into several plies separated by shale, clay, and/or impure coal partings. Average roof coal zone thickness across the PAMC area is just under 2-ft thick.

The immediate roof overlying the Pittsburgh Seam coal bed consists of two different assemblages of strata:

1. A "normal roof", composed of interbedded shales and sandy shales, with one to several rider or roof coals.
2. A "sandstone roof", composed of paleochannel sandstone fill, known as the Pittsburgh Sandstone, which scoured and replaced part or all of the normal roof strata.

The Pittsburgh Sandstone represents a major fluvial system that flowed north-northwest from West Virginia, through Greene and Washington counties, depositing sandstone in an elongated body up to 80-ft thick and several miles wide. The Pittsburgh Sandstone is a result of several instances of paleochannelization eroding the typical roof strata, and in some localized areas eroding some of the main bench of the Pittsburgh Seam. Areas of the deposit with sandstone channels in close proximity to the Pittsburgh Seam commonly exhibit discontinuities and rolls in the coal bed. Poor roof conditions are also common along margins of the channels, where the roof type transitions between the sandstone roof and normal shale roof. CONSOL has implemented various programs to identify and mitigate, where possible, problems associated with poor roof conditions.

The immediate floor beneath the Pittsburgh Seam coal bed consists of an interval of typically 1 ft or less of underclay. The underclay provides a generally competent floor, however poor floor conditions can develop when the underclay is exposed to water.

6.3.2 Structure

The Pittsburgh Seam coal bed is located at depths ranging from approximately 300 ft to over 1,400 ft below ground surface within the PAMC area. Seam structure shows a general seam dip of less than 1 degree to the south-southwest, with slightly steeper

areas dipping up to 4 degrees in a southeast-northwest trend. There are not any major structural faulting or tectonic features known to occur in the deposit. Small-displacement faults and compaction-related faults may be present but are not expected to materially affect mine plans.

The structural setting for the deposit is generally considered to be simple in terms of geological complexity. Some areas exhibit evidence of localized channelization; as such, isolated areas of the deposit may be considered moderate in geological complexity. Having been widely studied and extensively mined, the Pittsburgh Seam is well-known and widely-accepted to be a very uniform deposit.

6.3.3 Coal Quality

Overall, the Pittsburgh Seam coal bed is a high-rank, high-volatile bituminous, medium-ash, and medium-to high-sulfur coal that is used for both thermal and metallurgical purposes. The roof coal zones exhibit overall higher sulfur and ash contents, combined with lower calorific value; however, this is offset by the consistently superior quality of the main bench coal.

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7.0 EXPLORATION DATA

7.1 Background

The Pittsburgh Seam has been the subject of extensive exploration drilling and sampling by CONSOL and other parties, dating back to at least the 1920s. Records from exploration drilling comprise the primary data used in the evaluation of coal resources on the property. A database compiling the results of 7,317 drill holes—totaling more than 4 million feet of drilling which covers a large portion of the known extents of the PAMC area Pittsburgh Seam—along with electronic copies of original drilling and sampling logs, were provided for our review.

Additionally, CONSOL provided written field and exploration guidelines which outline some of their standard exploration and sampling methodologies. These guidelines were compiled by personnel from various company-wide exploration departments in the 1980s and are very thorough in regard to how CONSOL wanted drilling and sampling to be conducted. Topics covered standard procedures ranging from site safety and mapping, to how to select proper drilling equipment, recording accurate and detailed geological logs, performing coal sampling, supervising geophysical logging, and plugging drill holes once work was complete. CONSOL's provided exploration standards highlight their focus on obtaining the highest accuracy of data possible from the various exploration campaigns they completed.

Due to many company-wide restructurings, closures of various mining operations, and reorganization of departments as CONSOL evolved as a company over its many years in existence, specific drilling campaign reports, which would provide detailed information on the drilling and sampling methodologies utilized from year to year were placed into archival storage, and were not provided for our review. While this limits the ability to provide a completely transparent and detailed overview of the work completed in developing the PAMC, CONSOL has also demonstrated that they have been very thorough in exploring and sampling, and have been able to consistently and economically mine coal from this deposit for nearly 40 years, and from the Pittsburgh No. 8 Seam for more than a century.

7.2 Procedures

7.2.1 Drilling

Drill holes on the subject property were completed using various drilling procedures based on specific goals and data needs at various stages of planning and developing the PAMC. Some drill holes were rotary drilled for purposes of completing geophysical

logging, while others were completed using continuous core drilling methods to provide more detailed geologic records and sampling opportunities.

CONSOL geologists were able to summarize the standard types of equipment and procedures they generally utilized in exploration work completed on the property. This information, combined with information BOYD was able to gather from our review of drilling records are as follows:

- Frequently used drilling equipment that is utilized during exploration, depending on the goal of a specific drilling and sampling program, consists generally of one or both of:
 - Continuous NQ-sized (1.988 in. diameter) diamond core rigs.
 - Air rotary with either 4 in. or 6 in. diameter barrels.
- Presently, core logging activities are completed in the field. Cored intervals are photographed, with special attention paid to the coal interval. Cored coal is initially photographed in its entirety, and then again on 1-ft intervals from top to bottom to provide a detailed record of the coal core prior to sampling.
- Coal roof rock (approximately 30 ft) and floor rock (up to 5 ft) are photographed and then boxed for archival purposes. Drilling campaigns from 2018 on have archival cores stored at CONSOL's Pleasant Grove Storage Facility, in Pleasant Grove, Pennsylvania. Historically, CONSOL maintained regionally located core repositories, however these locations have been closed, and all core prior to 2018 have been disposed of.
- Geophysical logging on drill holes became standard starting in the mid-to-late 1970s. Prior to this time, geophysical logs were located for some drill holes, however they were much less frequently noted in the provided drill hole data files. CONSOL has noted that geophysical logging is currently completed on all holes drilled.

Due to the large extent of historic exploration work, any recent drilling is generally for infilling areas with lower geologic assurance. In such instances, nearby drill hole records are referenced prior to commencing any new drill holes, to show the anticipated depth to the coal horizons.

Geophysical logs obtained from newly drilled holes are correlated by CONSOL geologists by aligning known "marker beds", and then checking coal seam depths, elevations, and thicknesses to ensure seam continuity. These data are formatted and then imported into CONSOL's geologic modeling and mine production forecasting programs.

BOYD's review of the observed methodologies and procedures indicate the data obtained and utilized by CONSOL for the PAMC project area were carefully and professionally collected, prepared, and documented, conforming with general industry standards, and are appropriate for use of evaluating and estimating coal resources and reserves.

7.2.2 Coal Quality Sampling

The PAMC coal quality testing was performed on a large number of coal samples obtained from the Pittsburgh seam, in and around the project area. The relatively dense core drilling coverage, combined with channel samples being taken regularly from underground development areas, provides a thorough understanding of the various potential products that could be produced from the PAMC.

All coal intercepts of PAMC exploration were geologically logged, photographed, and sampled in the field by CONSOL geologists. Explicit instructions are given to drilling teams to keep any cored coal intervals inside of core barrels until a CONSOL geologist is on-site to observe and record characteristics of the coal interval.

Sampling methodologies consist of first pushing the cored intervals of coal out of the core barrel, directly into a clean single-row wooden core box. Prior to removing coal core from the drilling barrel, the core box is lined with durable plastic sheeting, which helps retain moisture content and minimize coal core oxidation. Once the coal core is fully extruded from the core barrel, it is then inspected, photographed, and logged by the on-site geologist, and cardboard inserts are installed in the wooden core box to maintain coal core integrity.

Upon completing detailed recording (geologic logging and photographing) of the coal interval, coal cores are split into the desired intervals to be analyzed (i.e., entire seam, main bench, roof coal, etc.) and bagged. An order sheet is placed inside the sample bag, which specifies drill hole information, split information, and testing to be completed on the bagged sample. Sample bags are then zip tied closed, labeled, and then double bagged to eliminate incidental core loss due to potential damage during transportation to the testing lab. It is important to note that CONSOL has various internal departments that may request exploration and sampling work be conducted, and the requesting department is given priority as to how the coal intercept is split, and as to the types of coal analyses that are run.

CONSOL maintains all control of coal core samples, up to the point that samples are handed over to the lab performing testing. Once logging and sampling is complete, the

sampled coal core intervals are transported to CONSOL headquarters by exploration personnel, at which time they are handed over to CONSOL's quality control department. The quality control department arranges pick up by the selected lab that will perform the required analyses. Currently, CONSOL contracts all testing to an independent laboratory (Geochemical Testing in Somerset, Pennsylvania). Typical analyses performed include moisture content (total and air dried at 60 mesh), full proximate, and specific gravity. The lab manager signs off on the return analysis sheet, indicating that testing results are accurate and that the sample provided was sufficient for testing purposes.

Past programs utilized a myriad of various accredited coal testing laboratories, again depending on what testing needed to be completed on the coal core at a given time. All analytical work was conducted to International Organization of Standardization (ISO) or ASTM International (ASTM) standards, and various available laboratory sample sheets were provided for review with drilling log data.

Available testing sheets were reviewed by BOYD during our drill hole data audit, and our review of the field and sampling procedures noted above showed that the general description and sampling work were conducted to appropriate standards. Based on the stated standards and laboratory used, BOYD considers the sample preparation and analytical procedures were adequate for the coal quality results for inclusion in geological modelling and coal resource estimation.

7.2.3 Coal Washability Testing

Coal washability tests (proximate analysis) were conducted at various specific gravities, generally ranging from 1.40 specific gravity float (SGF) through 1.60 SGF. Estimated coal reserves for the PAMC are currently reported using a combination of 1.50 SGF and 1.60 SGF testing results, being reported as a composited "adjusted clean" coal quality over the entire PAMC project area. Proximate analysis test results were completed on 1,614 drill core samples, which were used in estimating quantity and quality of the remaining PAMC coal reserves. Additional washed coal yield testing was also performed, with an additional 756 core samples being analyzed (or a total of 2,370 drill core samples being tested) for wash yields.

Lab testing of the cored coal intervals was generally conducted in one of two manners: (1) by splitting the three main intervals that comprise the entire Pittsburgh coal seam (the Pittsburgh roof coal interval, the draw slate, the Pittsburgh main bench coal interval) into separate intervals that are individually analyzed, or by (2) creating a "B Sample", consisting of the roof coal interval and the draw slate together, and a separate "A Sample", consisting of the main bench coal interval. In either scenario, a

composited Pittsburgh seam quality was then calculated by combining results from the individual analyses, in order to examine different mining scenarios and outcomes, which were used to maximize both the quality and quantity of coal that may be mined over the PAMC.

Although it was noted that CONSOL generally does not perform any randomized sample verification in order to conduct quality control testing of individual coal analyses, CONSOL's quality department typically will perform channel sampling and quality analyses, roughly every 1,000 ft throughout development sections. The channel sample data are then utilized to update quality and production forecasting models. A quarterly audit is also performed to verify that the forecasted quality data matches coal product quality.

7.2.4 Other Exploration Methods

There is no known ore reported via other methods of exploration (such as airborne or ground geophysical surveys) for the project area.

7.3 Results

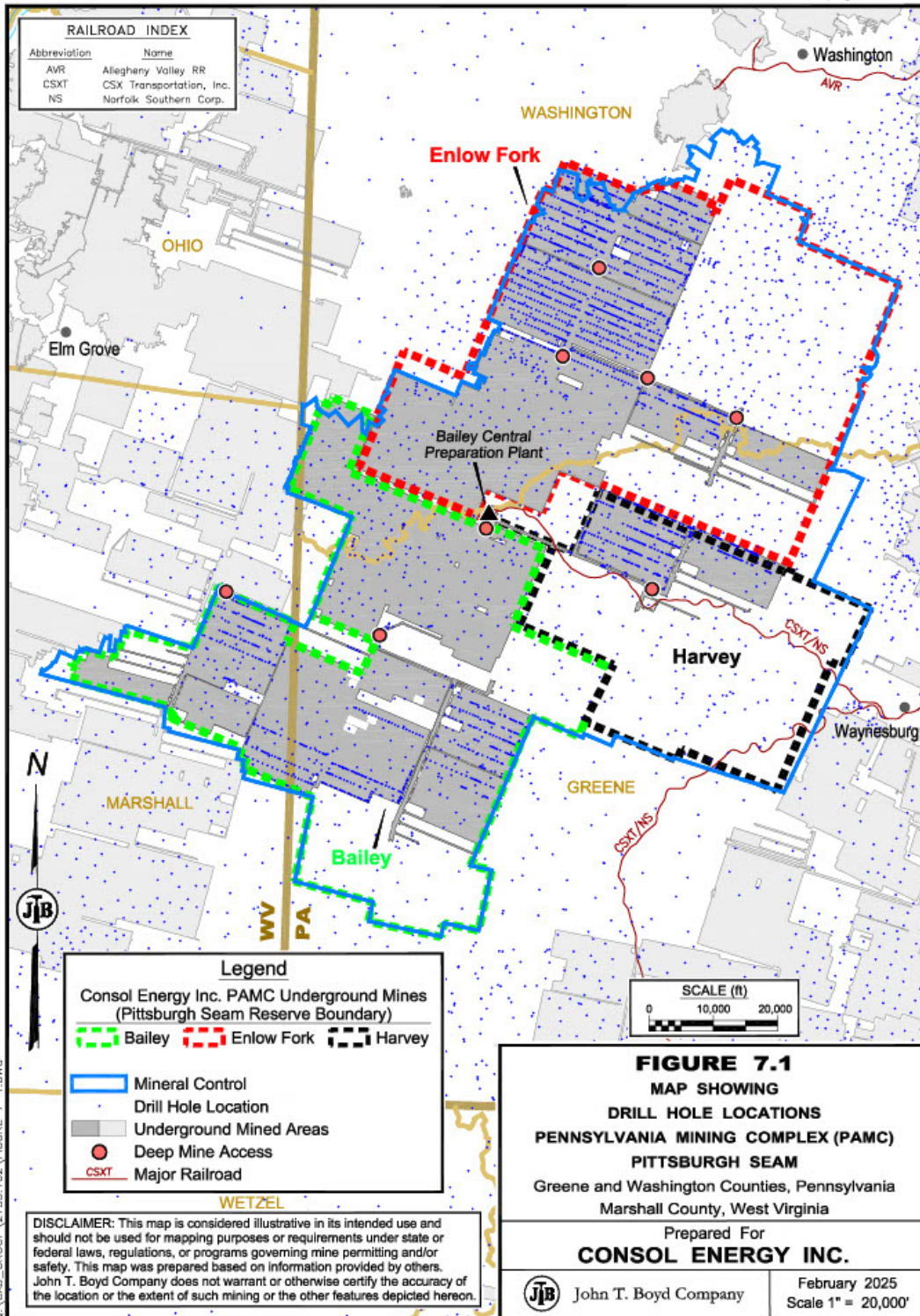
7.3.1 Summary of Exploration

A total of 2,377 drill holes and in-mine samples are in and around the PAMC area. The distribution of these drill holes is shown on Figure 7.1, following this page. Lithologic and coal quality data from these holes only were used for geologic modeling and coal resource assessment for the property.

General descriptive statistics for the three intervals of the Pittsburgh Seam are provided in Table 7.1. As shown, the thickness of the main bench is very consistent. Our analysis of drilling data indicates a very minor decrease in the thickness of the main bench when traversing the deposit from south to north.

Table 7.1: Descriptive Statistics, Pittsburgh Seam Thickness

	Interval Thickness (feet)		
	Main Bench	Draw Slate	Roof Coal
Mean	5.48	0.82	1.95
Minimum	0.78	0.00	0.00
Maximum	11.38	4.31	11.10
Standard Deviation	0.73	0.56	1.70
Coefficient of Variance	0.13	0.68	0.87



G:\CAD_GROUP\2755.102\FIGURE 7-1.DWG

The results of the coal quality analyses from 1,716 holes are summarized in Table 7.2.

Table 7.2: Descriptive Statistics, Pittsburgh Seam Coal Quality

	Units	Mean	Minimum	Maximum	Standard Deviation	Coefficient of Variance
Apparent Specific Gravity	g/cc	1.52	1.12	2.37	0.1	0.07
Raw Coal Quality:						
Ash	%	28.67	8.79	71.95	8.03	0.28
Sulfur	%	2.38	0.77	6.78	0.94	0.39
Heating Value	btu/lb	10,436	3,301	13,723	1,292	0.12
Volatile Matter	%	30.52	15.92	40.69	3.55	0.12
Clean Coal Quality:						
Yield	%	70.27	6.01	95.35	10.65	0.15
Ash	%	7.33	4.67	12.15	0.95	0.13
Sulfur	%	2.39	0.89	5.19	0.83	0.35
Heating Value	btu/lb	13,923	13,118	14,401	197	0.01
Volatile Matter	%	39.35	32.69	43.77	1.5	0.4

Note: Raw and clean coal qualities are provided on a mineable seam thickness, dry basis.

Raw and clean (washed) coal quality data demonstrate the consistency of the Pittsburgh Seam as a high-rank, high-volatile bituminous, medium-ash, and medium-sulfur coal.

7.3.2 Adequacy of Exploration

BOYD's review indicates that in general, CONSOL has performed extensive drilling and sampling work on the subject property. The work completed has been done so by competent personnel, and the amount of data available combined with wide-spread knowledge of the Pittsburgh Seam, is sufficient to confirm seam uniformity and continuity throughout the PAMC deposit.

7.4 Data Verification

For purposes of this report, BOYD did not verify historic drill hole data by conducting independent drilling in areas already explored. It is customary in preparing coal resource and reserve estimates to accept basic drilling and coal quality data as provided by the client subject to the reported results being judged representative and reasonable.

BOYD's efforts to judge the appropriateness and reasonability of the source exploration data included reviewing a representative sample of drilling logs and coal quality test results for holes located in unmined portions of the PAMC area. These records were compared with their corresponding database records for transcription errors; of which

none were found. Lithologic and coal quality data points were compared via visual and statistical inspection with geologic mapping and cross-sections.

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JOHN T. BOYD COMPANY

8.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

The reader is referred to Sections 7.2 and 7.3 of this report for details regarding sample preparation, analysis, and security.

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JOHN T. BOYD COMPANY

9.0 DATA VERIFICATION

The reader is referred to Section 7.4 of this report for details regarding data verification.

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JOHN T. BOYD COMPANY

10.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Information regarding coal washability testing is provided in Chapter 7.

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JOHN T. BOYD COMPANY

11.0 COAL RESOURCE ESTIMATE

11.1 Applicable Standards and Definitions

Unless noted, coal resource estimates disclosed herein are done so in accordance with the standards and definitions provided by S-K 1300. It should be noted that BOYD considers the terms “mineral” and “coal” to be generally interchangeable within the relevant sections of S-K 1300.

Estimates of coal resources are always subject to a degree of uncertainty. The level of confidence that can be applied to a particular estimate is a function of, among other things: the amount, quality, and completeness of exploration data; the geological complexity of the deposit; and economic, legal, social, and environmental factors associated with mining the resource. By assignment, BOYD used the definitions provided in S-K 1300 to describe the varying degree of certainty associated with the estimates reported herein.

The definition of mineral (coal) resource provided by S-K 1300 is:

Mineral resource is a concentration or occurrence of material of economic interest in or on the Earth's crust in such form, grade or quality, and quantity that there are reasonable prospects for economic extraction. A mineral resource is a reasonable estimate of mineralization, taking into account relevant factors such as cut-off grade, likely mining dimensions, location or continuity, that, with the assumed and justifiable technical and economic conditions, is likely to, in whole or in part, become economically extractable. It is not merely an inventory of all mineralization drilled or sampled.

Estimates of coal resources are subdivided to reflect different levels of geological confidence into measured (highest geologic assurance), indicated, and inferred (lowest geologic assurance). See Glossary of Abbreviations and Definitions.

11.2 Coal Resources

11.2.1 Methodology

Based on provided information, CONSOL's coal resources estimation and modeling techniques consist of:

1. Interpreted and correlated coal seam intercepts are compiled and validated. Seam thickness is aggregated and coal qualities are composited, based on assumed mining methods, for each data point.
2. Boundaries of the respective resource classification regions are developed using the data points.
3. ROM coal thickness and coal qualities for each data point are derived from the application of dilution parameters.
4. Clean product qualities for each data point are derived from coal washability analysis and plant efficiency factors.
5. The approved LOM design is subdivided into small mining blocks and sequenced using CONSOL's proprietary mine planning software.
6. In-place, ROM, and clean product estimates of coal volume and qualities for each mining block are estimated within the mine planning software by inverse distance interpolation of the data points developed in Steps 1 and 2.
7. The mining blocks (and associated volumetric data) are further subdivided by resource classification and property tract polygons.
8. Relevant regional and periodic summaries are prepared within CONSOL's software to support planning and coal resource/reserve reporting.

11.2.2 Criteria

Development of the coal resource estimate for the PAMC assumes mining using standard underground development and LW methods and equipment, which have been utilized successfully at the PAMC for over 35 years.

Within the area of study, the Pittsburgh Seam exhibits consistent and well-characterized clean (i.e., washed) coal qualities which are within existing marketable limits for PAMC coal products. BOYD did not discover any areas within the property where clean coal quality was deficient relative to CONSOL's historical coal sales and current sales contract specifications for thermal and metallurgical coal. As such, no reductions have been made to the coal resources due to coal quality.

A minimum mineable seam thickness of 5 ft was used to limit the coal resources. This thickness includes the Pittsburgh Seam main bench plus portions of the draw slate and roof coal as necessitated by the assumed mining methods. Mining heights less than 5 ft

can result in operational difficulties and increase out-of-seam dilution (OSD), thereby reducing productivity and increasing costs.

No other cut-offs were applied.

11.2.3 Classification

Geologic assuredness is established by the availability of both structural (thickness and elevation) and quality information for the Pittsburgh Seam. Classification is generally based on the concentration or spacing of exploration data, which can be used to demonstrate the geologic continuity of the deposit. Table 11.1 provides the general criteria employed in the classification of the coal resources.

Table 11.1: Coal Resource Classification Criteria

Classification (Geologic Confidence)	Data Point Spacing	
	Feet	Miles
Measured	0 - 3,000	0 - 0.57
Indicated	3,000 - 7,920	0.57 - 1.50
Inferred	7,920 - 15,840	1.50 - 3.00

Extrapolation or projection of resources in any category beyond any data point does not exceed half the point spacing distance.

BOYD reviewed the classification criteria employed by CONSOL with regards to data density, data quality, geological continuity and/or complexity, and estimation quality. The Pittsburgh Seam is well-known and of low complexity. We believe these criteria appropriately reflect the interpreted geology and the estimation constraints of the deposit. Coal resources in the PAMC area are very well-defined throughout nearly all areas of the mine plan. Observed drill hole spacing averages approximately 1,470 ft and generally ranges between 500 ft and 2,500 ft.

11.2.4 Coal Resource Estimate

There are no reportable coal resources excluding those converted to coal reserves for the PAMC. Quantities of coal controlled by CONSOL within the defined boundaries of the PAMC which are not reported as coal reserves, are not considered to have potential economic viability; as such, they are not reportable as coal resources.

11.2.5 Validation

BOYD independently estimated coal resources and reserves for portions of the PAMC mine plan representing approximately 20 years of mining under full-capacity conditions

and other current operating assumptions. Our analysis utilized industry-standard grid modeling and estimation techniques and resulted in no material differences with estimates provided by CONSOL.

Based on our review of CONSOL's well-documented geologic modeling and estimation techniques and the results of our data validation efforts (described earlier), we are of the opinion that CONSOL's resource estimation procedures are reasonable and appropriate. Furthermore, it is BOYD's opinion that the assigned resource classifications appropriately reflect the degree of uncertainty (assurance) associated with the quality of the exploration and sampling data, and the natural geological variability of Pittsburgh Seam.

BOYD is not aware of any technical, legal, economic, or other relevant factors that could materially affect the coal resource estimate

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JOHN T. BOYD COMPANY

12.0 COAL RESERVE ESTIMATE

12.1 Applicable Standards and Definitions

Unless noted, coal reserve estimates disclosed herein are done so in accordance with the standards and definitions provided by S-K 1300. It should be noted that BOYD considers the terms “mineral” and “coal” to be generally interchangeable within the relevant sections of S-K 1300.

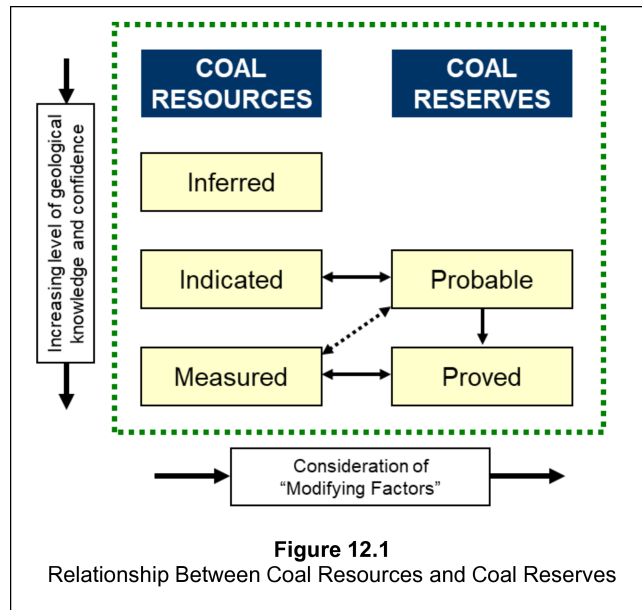
Estimates of coal reserves are always subject to a degree of uncertainty. The level of confidence that can be applied to a particular estimate is a function of, among other things: the amount, quality, and completeness of exploration data; the geological complexity of the deposit; and economic, legal, social, and environmental factors associated with mining the reserve. By assignment, BOYD used the definitions provided in S-K 1300 to describe the varying degree of certainty associated with the estimates reported herein.

The definition of mineral (coal) reserve provided by S-K 1300 is:

Mineral reserve is an estimate of tonnage and grade or quality of indicated and measured mineral resources that, in the opinion of the qualified person, can be the basis of an economically viable project. More specifically, it is the economically mineable part of a measured or indicated mineral resource, which includes diluting materials and allowances for losses that may occur when the material is mined or extracted.

Estimates of coal reserves are subdivided to reflect geologic confidence, and potential uncertainties in the modifying factors, into proven (highest assurance) and probable. See Glossary of Abbreviations and Definitions.

Figure 12.1 shows the relationship between coal resources and coal reserves.



In this report, the term “coal reserves” represents the tonnage and coal quality of product coal that will be available for sale after beneficiation of the ROM coal.

12.2 Coal Reserves

12.2.1 Methodology

The coal reserve estimates have been prepared using generally accepted industry methodology to provide reasonable assurance that the coal reserves are economic and recoverable at the time of evaluation.

12.2.2 Parameters and Assumptions

The underground mining operation uses a conventional retreating LW mining method. The underground mine plans address anticipated geologic, geotechnical, and hydrogeologic conditions. Mining and processing parameters are revised periodically, to assure that the conversion of in-place coal to saleable product are: (1) in reasonable conformity with present and recent historical operational performance, and (2) reflective of expected mining and processing operations.

Table 12.1 summarizes the mining-related parameters used by CONSOL in the estimation of coal reserves.

Parameter	Units	Mining Method	
		Development	Longwall
Mining Recovery	%	21 – 80	99
Dilution:			
Amount	feet	0.65	0.65
ASG	g/cc	2.50	2.50
Ash	%, db	80.0	80.0
Sulfur	%, db	2.00	2.00
Heating Value	btu/lb, db	1,000	1,000
ROM Adjustments:			
Moisture	%, ar	6.5	6.5
Ash	%, db	1.0	1.0
Sulfur	%, db	0.13	0.13

Mining recovery varies by mining method and design, with LW mining typically having the highest recovery factor. The average mining recovery for PAMC is expected to range between 75% to 85%.

Minor adjustments to ROM coal ash and sulfur content are made based on recent historical reconciliation studies. Product moisture was estimated at 6.15% (as-received basis).

Clean coal estimates are based on washability data, which are adjusted (reduced) to reflect practical yields achieved by the preparation plant. The preparation plant efficiency used in the estimation of coal reserves is 93.0%. The average product yield for the coal reserves is 55.6%. Figure 12.2 (page 12-5) depicts the estimated product yield for the Pittsburgh Seam across the PAMC deposit.

The Pittsburgh Seam across the PAMC property exhibits clean coal quality which is consistent with CONSOL's historical production and current sales contract specifications (please refer to Chapter 16 for further information). As such, BOYD does not foresee any quality deviations that would adversely affect the marketability of future coal production from the PAMC.

The economic viability of the stated coal reserves is demonstrated by the production and financial projections presented in Chapters 16, 18, and 19 of this report. The forecasted coal sales prices (at the mine) used in the estimation of the coal reserves for the PAMC

vary by year, ranging from \$59.10 to \$65.10 and averaging \$61.29 per clean ton over the life of the reserves (please refer to Chapter 16 for further details).

12.2.3 Classification

Proven and probable coal reserves are derived from measured and indicated coal resources, respectively, in accordance with S-K 1300. BOYD is satisfied that the stated coal reserve classification reflects the outcome of technical and economic studies. Figure 12.3 (page 12-6) illustrates the reserve classification of the Pittsburgh Seam within the PAMC.

12.2.4 Coal Reserve Estimate

CONSOL's estimated underground mineable coal reserves for the PAMC total 557.6 million recoverable (clean) product tons remaining as of December 31, 2024. The coal reserves reported in Table 12.2 (page 12-7) are based on the approved LOM plan which, in BOYD's opinion, is technically achievable and economically viable after the consideration of all material modifying factors.

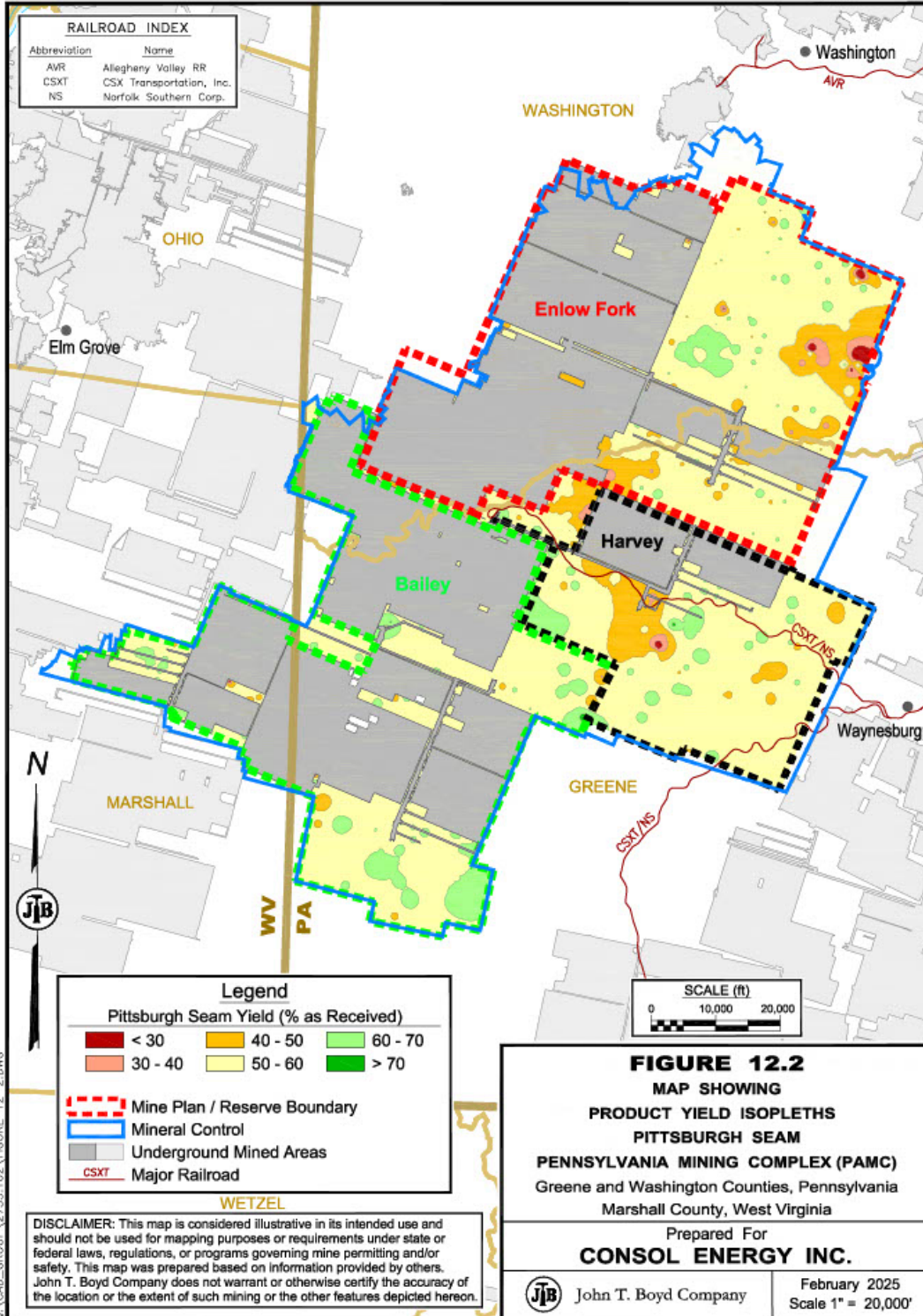
Coal reserves for the PAMC (as of December 31, 2024) are summarized by mine in Table 12.3.

Table 12.3: Coal Reserves Summary

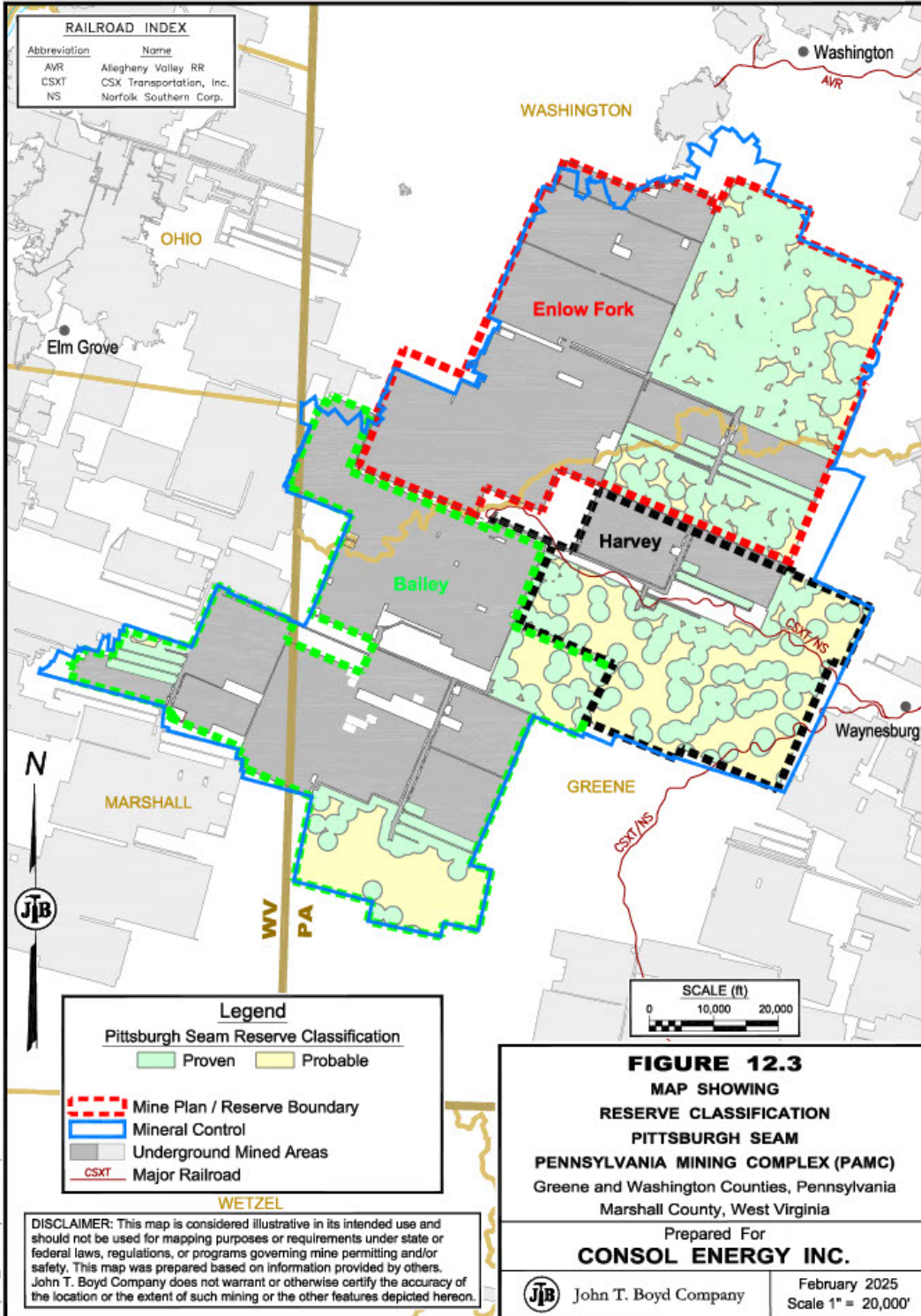
Mine	Product Tons (millions) by Classification		
	Proven	Probable	Total
Bailey	53.6	72.3	125.9
Enlow Fork	206.8	32.4	239.2
Harvey	101.1	91.4	192.5
Total	361.5	196.1	557.6

In terms of ownership, coal owned in fee by PAMC totals 523.1 million product tons (93.8% of the total reserve base), with the remaining reserves (34.5 million tons) held under lease agreements.

At the time of reporting, 277.4 million product tons (almost 50% of the reported reserve base) are permitted for mining by appropriate federal and state regulatory authorities. While the remaining 280.2 million product tons are not permitted, it is typical for coal operations to only hold mining permits for the reserves currently being mined or expected to be mined in the near future. As mining progresses, mining permits are periodically amended to add acreage/tonnage to sustain coal production. It is reasonable to expect that all necessary permits to recover the coal will be successfully obtained in advance of mining.



G:\CAD_GROUP\12755_102\Figure 12-2.DWG



G:\CAD_GROUP\2755.102\FIGURE_12-3.DWG

TABLE 12.2

ESTIMATED COAL RESERVES BY MINE
AS OF 31 DECEMBER 2024
PENNSYLVANIA MINING COMPLEX
Pennsylvania and West Virginia
Prepared For
CONSOL ENERGY INC.

By
John T. Boyd Company
Mining and Geological Consultants
February 2025

Control	Classification	Product Tons (millions)							Average Product Quality (As Received Basis)				
		By Permit Status			By SO ₂ Content (lbs per MMBtu)				Total Moisture	%			Heating Value (Btu/lb)
		Total	Permitted	Not Permitted	< 2.5	2.5 to 4.5	4.5 to 6.5	> 6.5		Ash	Volatiles Matter	Sulfur	
Bailey Mine													
Owned	Proven	40.7	31.1	9.6	2.8	25.4	7.5	5.0	6.15	8.2	37.0	2.78	12,880
	Probable	56.5	32.3	24.2	0.6	55.2	-	0.7	6.15	7.9	36.0	2.20	12,950
	Subtotal	97.2	63.4	33.8	3.4	80.6	7.5	5.7	6.15	8.0	36.4	2.44	12,920
Leased	Proven	12.9	12.9	-	1.3	11.4	-	0.2	6.15	7.7	36.4	2.39	13,003
	Probable	15.8	15.8	-	-	15.8	-	-	6.15	8.0	36.2	2.41	12,998
	Subtotal	28.7	28.7	-	1.3	27.2	-	0.2	6.15	7.8	36.3	2.40	13,001
Total	Proven	53.6	44.0	9.6	4.1	36.8	7.5	5.2	6.15	8.0	36.9	2.69	12,909
	Probable	72.3	48.1	24.2	0.6	71.0	-	0.7	6.15	7.9	36.0	2.24	12,960
	Total	125.9	92.1	33.8	4.7	107.8	7.5	5.9	6.15	8.0	36.4	2.43	12,938
Enlow Fork Mine													
Owned	Proven	202.7	76.8	125.9	28.2	174.5	-	-	6.15	7.6	35.7	1.99	13,007
	Probable	32.4	8.7	23.7	3.5	28.9	-	-	6.15	7.4	35.6	1.99	13,043
	Subtotal	235.1	85.5	149.6	31.7	203.4	-	-	6.15	7.5	35.7	1.99	13,012
Leased	Proven	4.1	0.1	4.0	0.1	3.9	-	0.1	6.15	7.4	35.6	1.87	12,994
	Probable	-	-	-	-	-	-	-	-	-	-	-	-
	Subtotal	4.1	0.1	4.0	0.1	3.9	-	0.1	-	7.4	35.6	1.87	12,994
Total	Proven	206.8	76.9	129.9	28.3	178.4	-	0.1	6.15	7.6	35.7	1.99	13,007
	Probable	32.4	8.7	23.7	3.5	28.9	-	-	6.15	7.4	35.6	1.99	13,043
	Total	239.2	85.6	153.6	31.8	207.3	-	0.1	6.15	7.5	35.7	1.99	13,011
Harvey Mine													
Owned	Proven	100.0	59.2	40.8	0.2	79.9	19.8	0.1	6.15	8.0	36.7	2.58	12,955
	Probable	90.8	38.8	52.0	-	67.5	23.3	-	6.15	8.1	36.9	2.71	12,923
	Subtotal	190.8	98.0	92.8	0.2	147.4	43.1	0.1	6.15	8.0	36.8	2.64	12,940
Leased	Proven	1.1	1.1	-	-	1.1	-	-	6.15	7.8	35.5	2.19	12,974
	Probable	0.6	0.6	-	-	0.6	-	-	6.15	7.8	35.5	2.16	12,965
	Subtotal	1.7	1.7	-	-	1.7	-	-	6.15	7.8	35.5	2.18	12,971
Total	Proven	101.1	60.3	40.8	0.2	81.0	19.8	0.1	6.15	8.0	36.7	2.58	12,955
	Probable	91.4	39.4	52.0	-	68.1	23.3	-	6.15	8.1	36.9	2.70	12,923
	Total	192.5	99.7	92.8	0.2	149.1	43.1	0.1	6.15	8.0	36.8	2.64	12,940
Total - All Mines													
Owned	Proven	343.4	167.1	176.3	31.2	279.8	27.3	5.1	6.15	7.7	36.2	2.26	12,977
	Probable	179.7	79.8	99.9	4.1	151.6	23.3	0.7	6.15	7.9	36.4	2.42	12,953
	Subtotal	523.1	246.9	276.2	35.3	431.4	50.6	5.8	6.15	7.8	36.2	2.31	12,969
Leased	Proven	18.1	14.1	4.0	1.4	16.4	-	0.3	6.15	7.6	36.2	2.26	12,999
	Probable	16.4	16.4	-	-	16.4	-	-	6.15	7.9	36.2	2.40	12,997
	Subtotal	34.5	30.5	4.0	1.4	32.8	-	0.3	6.15	7.8	36.2	2.33	12,998
Total	Proven	361.5	181.2	180.3	32.6	296.2	27.3	5.4	6.15	7.7	36.2	2.26	12,978
	Probable	196.1	96.2	99.9	4.1	168.0	23.3	0.7	6.15	7.9	36.4	2.42	12,957
	Total	557.6	277.4	280.2	36.7	464.2	50.6	6.1	6.15	7.8	36.2	2.31	12,970

The coal reserves of the PAMC are well-explored and defined. It is our conclusion that nearly two-thirds of the stated reserves can be classified in the proven reliability category (the highest level of assurance) with the remainder classified as probable. Given the uniformity of the Pittsburgh Seam in and around the PAMC, it is reasonable to assume that further exploration and testing will confirm the occurrence of coal reserves and increase the percentage reportable as proven.

Table 12.4 below summarizes the washed coal quality for each mine of the PAMC. The reported coal reserves generally consist of high-rank, high-volatile bituminous, medium ash, and medium-to high-sulfur coal that may be used for thermal and limited metallurgical purposes.

Table 12.4: Coal Reserves Product Quality Summary

Mine	Average Product Quality (As Received Basis)				Heating Value (Btu/lb)
	%				
	Total Moisture	Ash	Volatile Matter	Sulfur	
Bailey	6.15	8.0	36.4	2.43	12,938
Enlow Fork	6.15	7.5	35.7	1.99	13,011
Harvey	6.15	8.0	36.8	2.64	12,940
Average	6.15	7.8	36.2	2.31	12,970

Figures 12.4 and 12.5 illustrate the product ash and product sulfur content over the PAMC area. As shown, there are slight increases in both ash and sulfur content from east to west across the property. The distribution of PAMC’s coal reserves by sulfur dioxide (SO₂) emission category (reported in pounds [lbs] per million Btu [MMBtu]) is shown in Figure 12.6. Approximately 90% of the reported coal reserves are considered medium-sulfur or better coals.

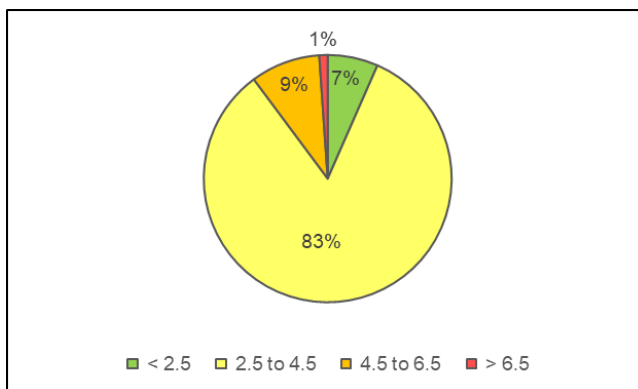
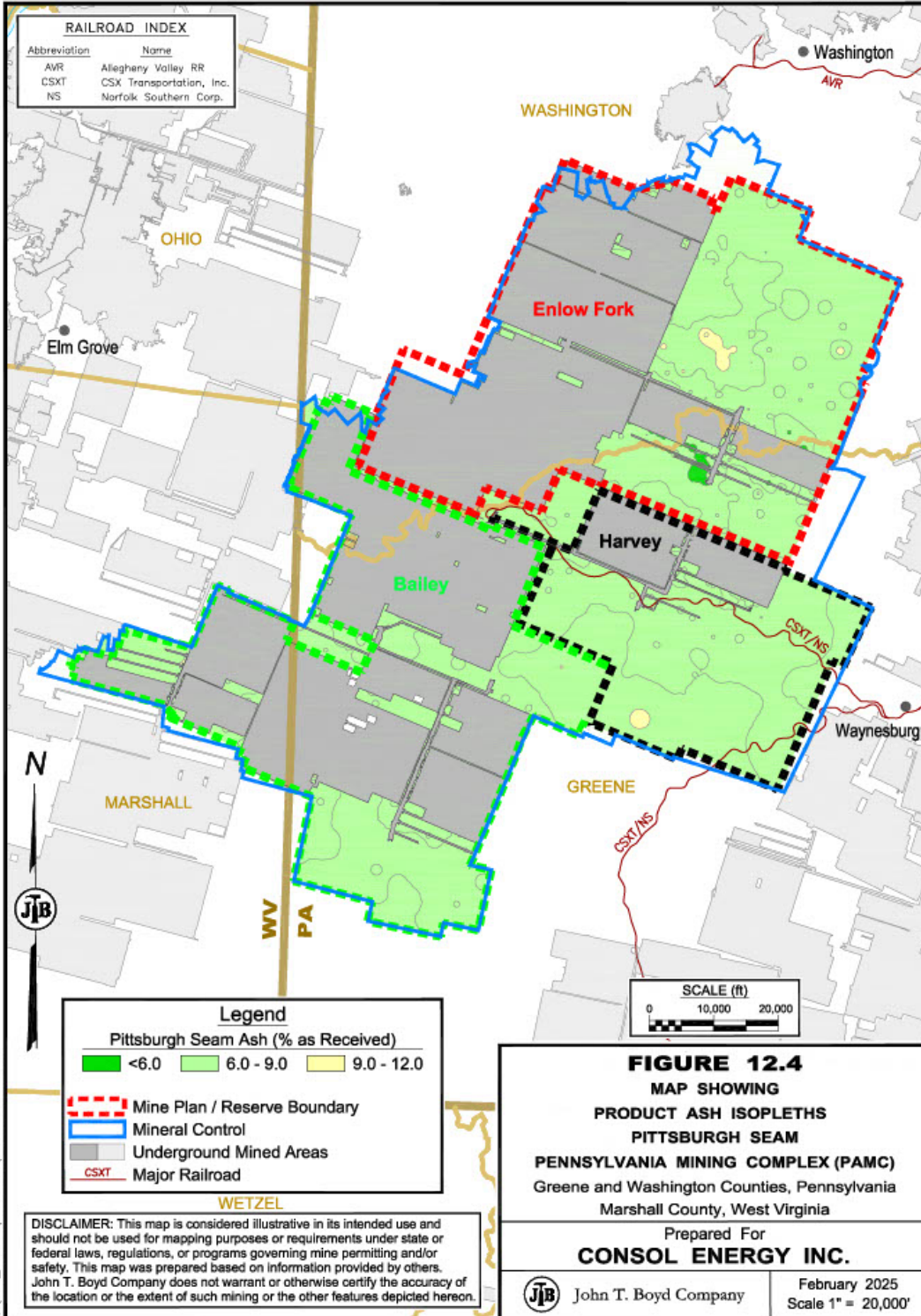
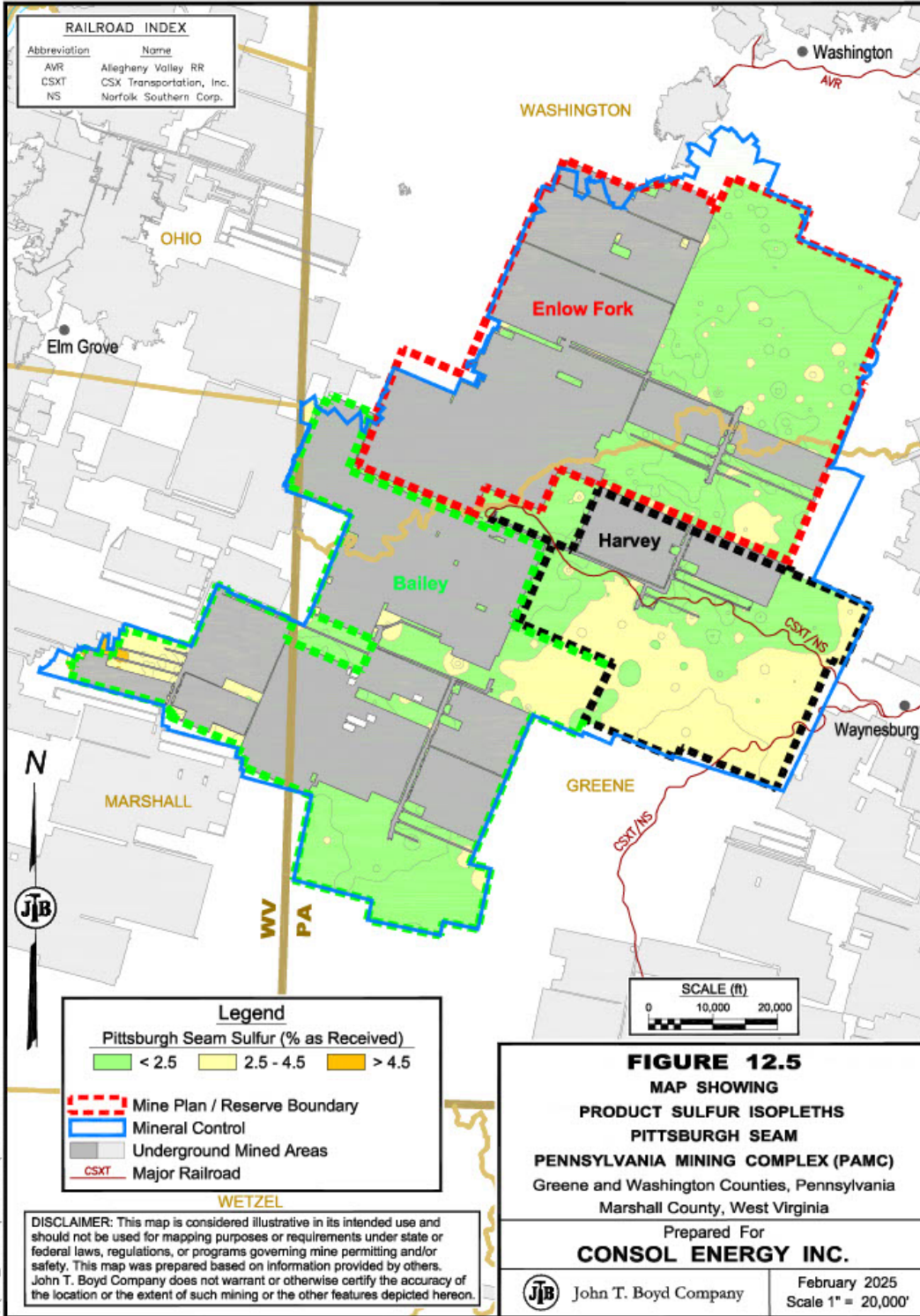


Figure 12.6: Distribution of PAMC Coal Reserves by Sulfur Dioxide Category



G:\CAD_GROUP\2755.102\FIGURE_12-4.DWG



G:\CAD_GROUP\2755_102\FIGURE_12-5.DWG

The PAMC is an established underground coal mining and processing complex with a lengthy operating history. BOYD has assessed that sufficient studies have been undertaken to enable the coal resources to be converted to coal reserves based on current operating methods and practices. Changes in the factors and assumptions employed in these studies may materially affect the coal reserve estimate. The extent to which the coal reserves may be affected by any known geological, operational, environmental, permitting, legal, title, variation, socio-economic, marketing, political, or other relevant issues has been reviewed as warranted. It is the opinion of BOYD that CONSOL has appropriately mitigated, or has the operational acumen to mitigate, the risks associated with these factors. BOYD is not aware of any additional risks that could materially affect the development of the reserves.

Based on our audit review, we have a high degree of confidence that the estimates shown in this report accurately represent the available coal reserves controlled by CONSOL at the PAMC, as of December 31, 2024.

12.2.5 Reconciliation with Previous Estimates

When comparing CONSOL's coal reserve estimates as of December 31, 2024, with those reported as of December 31, 2023, we note a net decrease resulting from property acquisitions, revisions to mine plans and associated modifying factors, and depletion through ordinary mining operations and inventory sales. Figure 12.7 illustrates the effects of each of these changes.

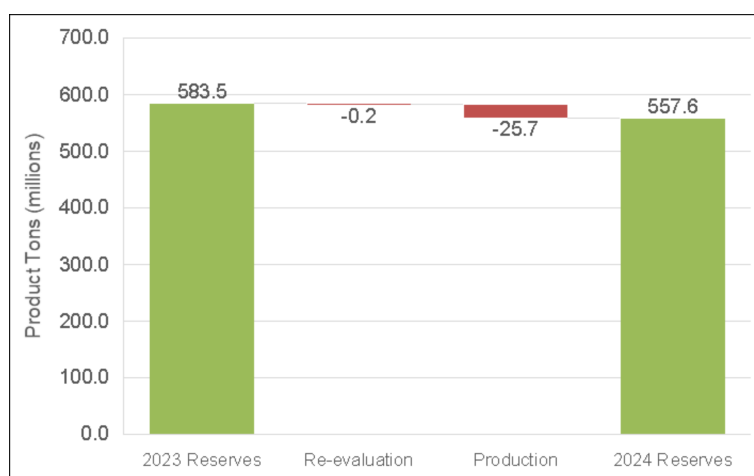


Figure 12.7
Reconciliation with Previous Coal Reserves Estimate

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13.0 MINING METHODS

13.1 Mining Method Description

PAMC is comprised of the Bailey, Enlow Fork, and Harvey underground mines (see Figure 3.1 for the general layout of each mine). Each mine utilizes LW mining for primary production with supporting mine development performed by CM. LW mining supported by CM development has been the primary approach to mining the Pittsburgh Seam (within which PAMC operates) for decades. Mining methods utilized by the Bailey Mine, which first began LW production in 1984 and is the oldest of the PAMC's three operations, are largely identical to those utilized at the Enlow Fork Mine and the Harvey Mine.

The LW mining method is centered around a dual-drummed coal cutting machine (shearer) that traverses the coal face of the developed LW panels. An illustration of a typical LW mining operation is provided in Figure 13.1

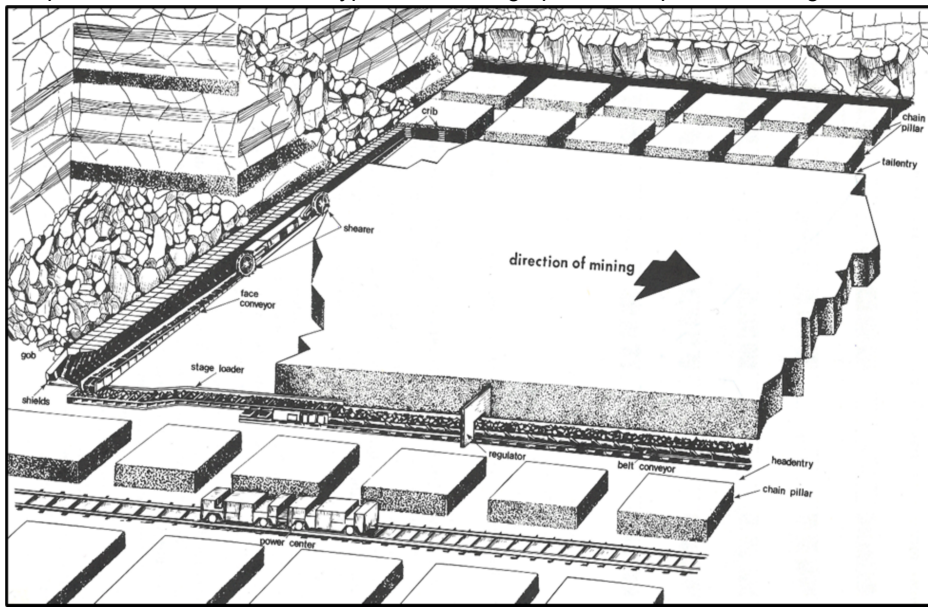


Figure 13.1
Longwall Mining Method
Source: Eickhoff America Corp.

The shearer advances through the developed LW panels by cutting a uniform slice of coal (approximately 42 in. in depth) as it travels back and forth across the length of the LW panel width (approximately 1,500 ft). Each pass or cut by the shearer completely removes the coal directly in front of the cutting drum. Hydraulically powered LW shields are used to support the immediate mine roof at the face, above the shearer. As the shearer cuts across the faceline (advancing 42 in. at a time), the LW shields similarly advance forward. In normal supporting conditions, the canopy of the LW shield is set tightly against the roof strata using the supporting resistances of the shield's hydraulic legs. When the shearer cuts and passes several shield units, the shield support legs for each shield unit are sequentially lowered and pulled forward the distance equal to the depth of cut (i.e., 42 in.). Upon advancing, the unsupported mine roof immediately behind the LW shields will collapse. In addition to providing roof support, the LW shields also allow production and maintenance employees to safely access/travel across the entire length of the LW face during the mining process.

Coal cut by the LW shearer is removed via an armored face conveyor (AFC) which runs along and parallel to the LW face, beneath the LW shields. The AFC serves as the track for the shearer to move on and as a guide to hold the machine in place. Coal cut by the shearer is continuously loaded onto the AFC and is transported to the "headgate" area where the LW face intersects perpendicularly with the adjacent, developed mine entry (i.e., the "headgate-entry"). Here the coal is passed through a crusher unit and is dumped onto a stageloader system, which in turn empties onto a belt conveyor located in the adjacent entry (some distance out by the headgate area). After the coal has been loaded onto the conveyor belt, it begins a multiple mile egress through existing underground mine workings to be discharged into ROM storage facilities on the surface.

Each of the PAMC underground mines have multiple CM development sections which develop the underground network of main entries, gate entries, setup entries, etc., necessary to support the LW production unit(s). Mine entry development is performed on each section by a piece of equipment known as a Miner Bolter (MB). The MB is a machine capable of cutting coal with a rotating drumhead while simultaneously supporting the newly exposed mine roof via the installation of roof bolts. The MB is outfitted with drill booms which drill holes into the newly exposed mine roof. The MB then inserts a high strength metal roof bolt (or roof bolt and adhesive glue combination) into the freshly drilled holes, thus securing (or "bolting") the immediate exposed mine roof to more competent rock strata directly above the entry.

Coal cut by the MB is stockpiled behind the unit where a loading machine with oscillating gathering arms is positioned. The loading machine loads the stockpiled coal onto an

electric-powered transport vehicle (known as a "shuttle-car") which then transports the mined coal to the development section's feeder. Here the coal is crushed and then loaded onto a rubber conveyor belt for removal. Like the coal mined from the LW operation, development section ROM coal is transported through the mine workings on a series of conveyor belts until it reaches the surface.

The MB will continue mining in a single entry for a specified length according to ventilation requirements and/or mine operator preferences for completing the desired network of mine entries. Once the MB has developed the specified area, the MB will be moved to an adjacent entry to begin development. The freshly developed entry will then have additional roof bolts installed throughout its entirety by a roof bolting machine. These additional roof bolts will be installed as necessitated by the mine's roof control plan or to the preferences of the mine operator. The process of developing the specified length of entries will be continued until the required entries have been developed and connected. The developmental belt will then be advanced (along with the section power supply) to shorten the required shuttle or ram car haul distance from the production faces. Once completed, the CM section mining cycle will resume, and be continuously repeated until necessary supporting entry infrastructure has been fully developed.

13.2 Mine Equipment and Staffing

13.2.1 Mine Equipment

The equipment utilized at the three PAMC underground LW mines is nearly identical to one another. This allows for synergies between the operations, including equipment, critical spare parts sharing, as well as buying power with equipment providers. Additionally, mining equipment utilized by PAMC is not unique to the Pittsburgh Seam LW region and is similar to the equipment commonly used by competitor LW mines in the region.

PAMC plans to operate multiple LW faces and CM sections annually to achieve forecasted production. Based on BOYD's review of the PAMC equipment and asset listings, the operations' current complement of equipment aligns with the projected level of production outlined in the LOM plan. In BOYD's opinion, all mining equipment utilized on the PAMC LW and CM sections is suitable for the mining conditions anticipated, as well as for the currently anticipated rates of production.

13.2.2 Staffing

PAMC's underground mines and coal preparation facility are staffed by a workforce primarily from the surrounding southwestern Pennsylvania, eastern Ohio, and northern

West Virginia areas. The workforce is comprised of both hourly and salary employees, in a similar fashion to those of other operating mines within the region. Unlike many competing mines within the region, the PAMC work force has no labor union affiliation. Table 13.1 provides recent historical end-of-year employment for PAMC:

Table 13.1: PAMC Historical Employee Count

2000	2021	2022	2023	2024
1,450	1,320	1,424	1,553	1,580

Source: Mine Safety and Health Administration

Except for a drop in employment in 2020 (attributed to poor market conditions during the COVID pandemic), staffing levels across the operational sites have largely remained consistent¹. Excluding the 2020 decline, forecasted employment levels align with historical levels. Going forward, given CONSOL’s ability to hire and retain employees, staffing is not expected to hinder PAMC’s currently anticipated production forecast.

13.3 Mine Production

13.3.1 Historical Mine Production

Historical mine production data (through year-end 2024) for the three PAMC underground LW mines, based on publicly available information reported by the MSHA, are shown in Figure 13.2.

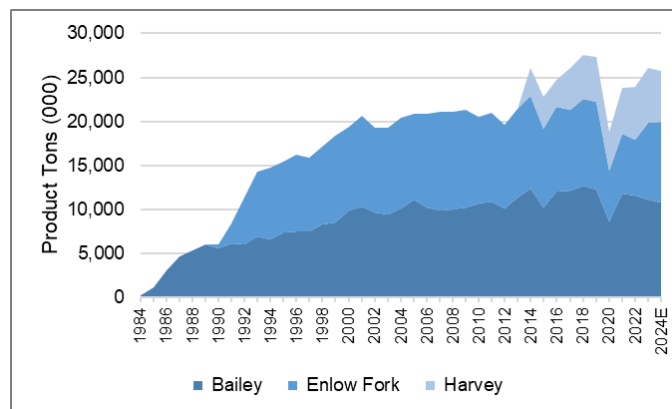


Figure 13.2
Historical PAMC Coal Production

¹ It is not uncommon for coal operators in the region to fluctuate employment to match market conditions.

Relevant information regarding the three PAMC operations includes:

- Bailey Mine first recorded production from development mining during 1984, and subsequently experienced its first LW production in 1985. Through 2024, Bailey Mine has produced approximately 360 million tons since beginning operations. During its operating life, Bailey has been known as one of the most productive LW operations in the United States on a tons per employee hour (TPEH) basis. Bailey operates two LW faces.
- Enlow Fork first recorded production from development mining during 1989, which was followed by its first LW production recorded in 1991. Enlow Fork has produced approximately 305 million tons since beginning development mining in 1989 through 2024. Enlow Fork has historically operated two LW faces.
- Harvey, which is the newest of the PAMC mines, first recorded production from development mining during 2009 under the Bailey Mine MSHA identification number. The Harvey Mine officially began recording production under its own MSHA identification number during 2014. Harvey has produced approximately 53 million tons attributable to its own mine identification number. Harvey operates one LW face.

As a complex, PAMC has produced a combined 717.6 million tons of clean coal from 1984 to 2024. Through the same period, the complex has recorded an average productivity level of 7.0 TPEH. Figure 13.3 shows historic mining productivity for PAMC and each mine individually since their start.

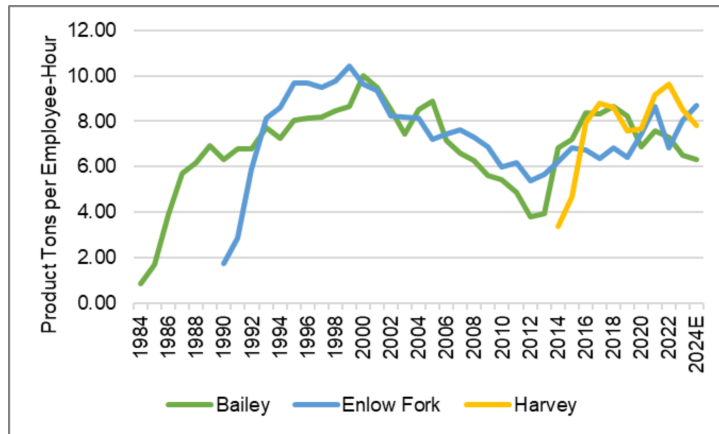


Figure 13.3
Historic PAMC Mining Productivity

13.3.2 Forecasted Production

BOYD reviewed the LOM plans for each of the PAMC underground LW mines to determine whether the plans: (1) utilize generally accepted engineering practices, and (2) align with historical and industry norms. Based on our assessment, it is BOYD’s opinion that the forecasted production levels for the PAMC operations are reasonable, logical, and consistent with typical LW mining practices in the Pittsburgh Seam and historical practices utilized by PAMC.

Currently anticipated PAMC clean coal production (through 2061) is shown in Figure 13.4, below.

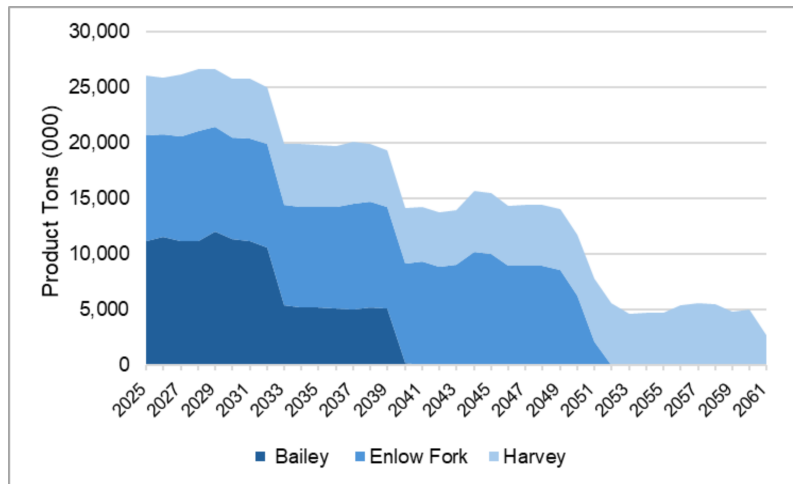


Figure 13.4
Projected PAMC Clean Coal Production

In the aggregate, the PAMC LOM plan projects the complex will produce approximately 557.6 million tons of clean coal over its operational horizon. The rate at which the PAMC produces coal can vary based upon how the mines are operated.

While individual mines may encounter local areas of high ash and/or sulfur, PAMC’s infrastructure enables the output from each of the individual mines to be strategically blended, thus mitigating the influence/impact that an individual mine or production unit (producing in a localized area of lesser coal quality) could have on the complex’s overall product quality.

13.3.3 Mining Recovery and Dilution Factors

The PAMC’s underground LW mines operate within the same geological setting and coal seam with little distinguishable differences. As such, the design of each mine is largely

the same (e.g., LW panel widths and lengths are relatively similar, as are the dimensions for CM development support pillars). As a result, mining recoveries within the individual mine plans are largely similar. The estimated mining recoveries for PAMC's LW production panels is 99% and for the CM development areas ranges from 25% to 40%. Based on our audit of PAMC's reserves by individual mining areas, it is BOYD's opinion that the mining area recoveries are reasonable and align with general engineering principles.

The proximity of the operations within the same geologic setting and coal seam also results in similar dilution factors across the PAMC mines. The mining horizon targeted by each of the mines includes the main bench of the Pittsburgh Seam, draw slate (or binder), and overlying roof coal (refer to Chapter 4 for a generalized stratigraphic column of the Pittsburgh Seam). Each of the mines operate in a similar manner where the entirety of the main bench of coal and immediate draw slate (or binder) is removed. Subsequently, the roof coal immediately above the draw slate layer may be completely or partially removed based on the thickness of the total mining horizon.

The CM development sections have minimum mining heights which must be maintained to transport equipment and employees, provide ventilation airways, provide adequate clearances at belt transfers, etc., regardless of the targeted mining horizon thickness. As a result, OSD variances on the CM development sections are more sporadic versus the LW sections; these variances are more likely a result of mine infrastructure and design rather than fluctuations in geology.

The LW production panels have minimum mining heights which must be maintained to provide clearance for LW equipment operation throughout the panel. The PAMC operations will mine to a certain mining horizon to provide the sufficient height necessary to mitigate operational risks (e.g., localized seam rolling, dipping, and zones of increased loading on LW shields, etc.), while also attempting to keep OSD to a minimum. Typically, this will result in mining the main bench of coal and draw slate in their entirety and leaving a portion of the roof coal (if mining horizon clearances allow). Estimated mining heights for the PAMC mines generally range from 7.5 ft to 8.5 ft but can reach 8.75 ft in portions of the Bailey Mine. BOYD views these mining heights as reasonably accurate and acceptable within the Pittsburgh Seam LW mining industry. These mining heights generally correlate with the OSD estimates for the Bailey, Enlow Fork, and Harvey mines (i.e., 25% OSD plus-or-minus 5%) which appears to agree with the PAMC forecasted production outputs.

13.4 Other Mining Considerations

13.4.1 Mine Design

The Pittsburgh Seam is widely recognized as being ideally suited for LW mining. The region's massive extent of reserves, good overall mining conditions, seam consistency, and relatively low population density on the overlying surface (vital to minimizing the impact of mine subsidence and the cost associated) are conducive to efficient, low-cost production operations.

Mining plans for large LW mines are simple but relatively inflexible, as major modifications to these mine plans require significant foresight and planning well in advance of mining. The entire foundation of the mining plan is based upon economies of scale resulting from a defined mining plan with high levels of annual output through all projected areas. The PAMC LW panels are large, typically measuring between 1,400 ft to 1,600 ft in width and up to 15,000 ft in length. This approach minimizes the percentage of high-cost CM output relative to low cost LW coal. Furthermore, the use of enormous panels maximizes the LW's operating time (i.e., less LW panel transfers throughout reserve exhaustion). Lead times for the development of LW panels are extensive, as CM development mining must be performed months or years in advance of the commencement of LW production. The application of the LW mining system is rigid. Therefore, there is minimal opportunity to alter the mining plan so as to avoid specific (localized) areas with adverse mining conditions (such as thin coal, poor roof, etc.) or poor coal quality (such as high sulfur, etc.). The only practical option is to mine through these adverse areas as CONSOL has successfully done in the past. On an annualized basis, this philosophy results in maximized recovery of reserves and minimized unit operating costs.

Coal mining operations are unlike other industrial facilities in that mines are not "assembly lines" or "factories" that are engineered to an exact design capacity or specific cost structure. Mining operations are conducted in the earth's strata, rather than within a homogeneous environment. There is inherent geologic risk, and mine operators must therefore contend with periodic adverse or variable geological conditions that cannot be fully anticipated in advance of actual mining activity. While the occurrences of these physical conditions are beyond the control of site management, it should not be interpreted that coal mining is inherently risky. On the contrary, there are established measures that mine operators utilize to minimize the operational and financial impacts associated with such encounters. Coal mining operations, such as the PAMC LW mines, have demonstrated a longer-term track record of sustaining consistent and predictable levels of performance on an annualized basis.

There remains substantial public and environmental group opposition to mining in general, particularly to LW mining and the effects of subsidence on surface structures and, more recently perennial streams. Ultimately, there is no current alternative to continued coal utilization for coal-fired electricity generation, manufacturing of coke, etc. While coal mining will continue, there are no indications that external pressures on the industry will lessen. CONSOL has historically demonstrated the ability to apply for and obtain the necessary permits for continued LW mining within their controlled reserves, even while being met with some environmental pushback. The established track record gives confidence in CONSOL's ability to work with environmental and regulatory agencies to achieve mine designs which allow for large reserve extractions while still maintaining environmental efficacy and good relationships with the surrounding communities.

13.4.2 Mining Risk

LW mines face two primary types of operational risks. The first category of risk includes those daily variations in physical mining conditions, mechanical failures, and operational activities that can temporarily disrupt production activities. Several examples are as follows:

- Roof control problems and roof falls.
- Water accumulations/soft floor conditions.
- Ventilation disruption and concentrations of methane gas.
- Variations in seam consistency, thickness, and structure.
- Failures or breakdowns of operating equipment and supporting infrastructure.
- Weather disruptions, power outages, etc.

The above conditions/circumstances can adversely affect production on any given day but are not regarded as "risk issues" relative to the long-term operation of a mining complex. Instead, these are considered "nuisance items" that, while undesirable, are encountered on a periodic basis at virtually all mining operations. PAMC engineered mining plans and projections appear to incorporate historic performance levels as a basis, and thereby mitigate the likelihood that the mines will experience such disruptions to production operations to the extent that they have previously occurred. BOYD does not regard the issues listed above as being material to the PAMC mining operations or otherwise compromising their forecasted performance.

The second type of risk is categorized as "event risk." Items in this category are rare, but significant occurrences that are confined to an individual mine, and ultimately have a pronounced impact on production activities and corresponding financial outcomes.

Examples of event risks are major fires or explosions, floods, or unforeseen geological anomalies that disrupt extensive areas of underground mine workings and require alterations of mining plans. Such an event can result in the cessation of production activities for an undefined but extended period of time (measured in months, and perhaps years) and/or result in the sterilization of coal reserves.

The US mining industry has made tremendous strides in enhancing employee safety and reducing the likelihood of fires, explosions, and other dramatic events over the past several decades, and underground LW mining is largely a predictable and safe industry. BOYD does not regard the PAMC mining operations and their mine plans as being particularly risky, inadequately managed, or otherwise susceptible to major events. There is no basis to predict or otherwise anticipate major operational shortfalls and/or extraction of coal reserves at any of the PAMC mining operations.

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14.0 PROCESSING OPERATIONS

14.1 Overview

The centrally located Central CPP is designed to process the combined ROM output produced by PAMC's three underground LW mines. Comprised of ROM coal storage silos, a coal processing plant, clean coal storage silos, and a rail loadout facility, the 300-acre processing complex is located within proximity of the active operations.

The Central (or "Bailey Central") CPP first began operation as the coal washing facility for the Bailey Mine in 1984. Since then, the Central CPP has undergone many expansions. In 2011, major renovations were made to the Central CPP to accommodate additional tonnage supplied from the newly commissioned Harvey Mine. Major process upgrades focused on improving processing circuit efficiencies and throughput as well as improved rail car loading capacity.

The Central CPP consists of two state-of-the-art PLC controlled heavy media plants with a combined rated raw coal capacity of 8,200 TPH. The plant employs five separate modules as shown in Table 14.1:

Table 14.1: Bailey CPP Module Summary

Plant	Module	Commission Date	Processing
			Capacity (Raw TPH)
Plant 1	1A	1989	2,000
	1B	1989	2,000
	Subtotal		4,000
Plant 2	2A	1991	1,400
	2B	1991	1,400
	2C	2004	1,400
	Subtotal		4,200
Total			8,200

A single plant operator can operate all five plant modules.

With a current processing capacity of 8,200 raw TPH, it is the largest CPP in the United States.

While the capacity of the facility has grown, the coal preparation process at Central CPP, like other preparation plants in the Pittsburgh Seam mining region, has largely remained

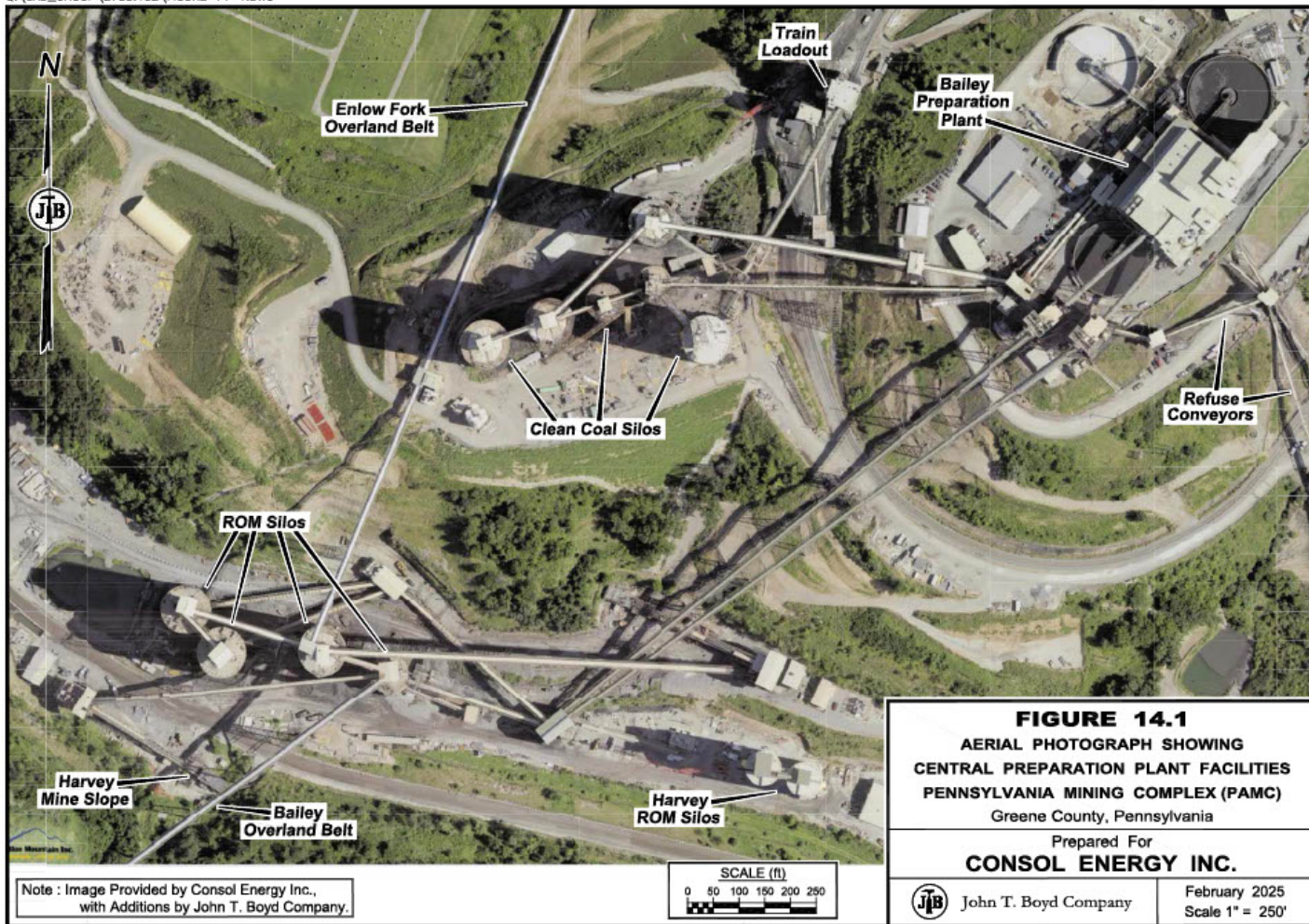
unchanged over the decades. Processing circuits within the Central CPP consist of heavy media bath, heavy media cyclones, hydro-spirals, and froth flotation. Rudimentary when compared to many other mineral processing techniques, the coal process is largely based on separating rock material from coal material contained in the raw coal feed by mechanically reducing the size of the feed and utilizing the materials' different densities to gravitationally separate one from the other. Largely, the process requires water, magnetite, and frothing agents.

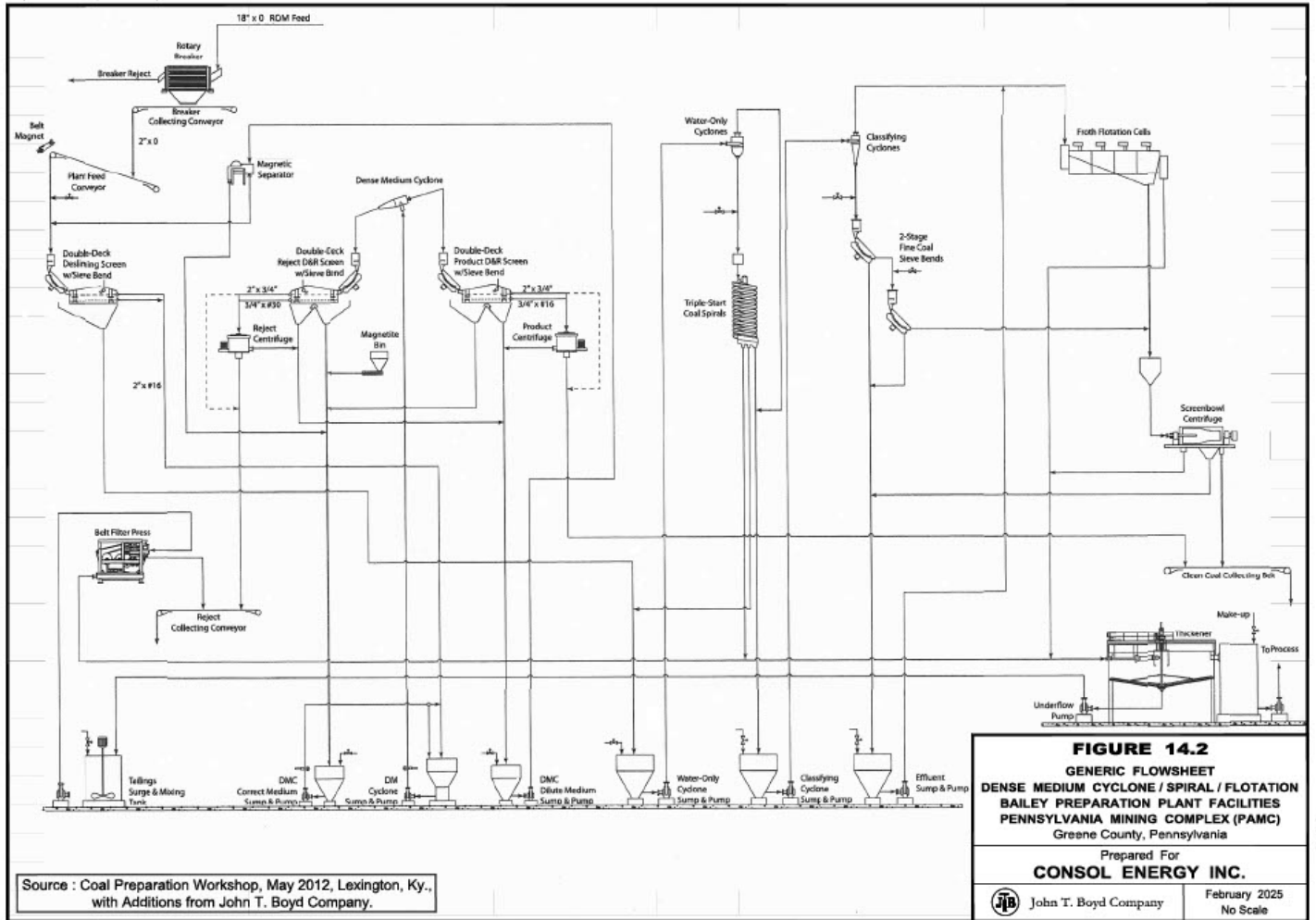
ROM coal is shipped to the complex from the Bailey and Enlow Fork mines via two independently operated overland conveyor belts² while the centrally located Harvey Mine's slope conveyor belt delivers coal directly to the complex. There are nine ROM coal storage silos that provide approximately 153,000 tons of above-ground storage for the PAMC underground mines, six of which are located at the Central CPP complex. The ROM coal storage silos enable each mine to provide their plant feed separately to the preparation facility. The clean coal product is dried with screen-bowl centrifuges. Processed product is then stored in concrete silos with a total capacity of over 100,000 tons.

Clean coal is sampled and loaded into 212-car or smaller unit trains through a batch weigh system. The Central CPP is served by both the NS and CSX via a 19-mile rail spur that connects the complex with the mainline rail at Waynesburg, Pennsylvania. Two rail sidings are employed to facilitate railroad transportation logistics. At any time, the plant can accommodate four-unit trains: one unit train on the siding heading into the train load-out loop; one unit train being loaded; one unit train loaded and on the 8,000-ft siding; and one unit train loaded and leaving the facility. The train loadout system has a capacity of approximately 36 million tons per year.

Following this page are Figure 14.1, which provides an aerial overview of the preparation facility area, and Figure 14.2, which provides a generic flow sheet of the CPP and related facilities.

² The length of the overland belt from the Bailey Mine to the Central CPP is 4.2 miles; the length of the overland belt from the Enlow Fork Mine to the Central CPP is 5.5 miles.





Source : Coal Preparation Workshop, May 2012, Lexington, Ky.,
with Additions from John T. Boyd Company.

FIGURE 14.2
GENERIC FLOWSHEET
DENSE MEDIUM CYCLONE / SPIRAL / FLOTATION
BAILEY PREPARATION PLANT FACILITIES
PENNSYLVANIA MINING COMPLEX (PAMC)
 Greene County, Pennsylvania
 Prepared For
CONSOL ENERGY INC.
 John T. Boyd Company February 2025
 No Scale

14-4

14.2 Historical Operation

Due to the evolution and enlargement of CONSOL's PAMC operations, the Central CPP has undergone modifications and expansions to accommodate the complex's increased coal production and washing requirements. The plant has historically operated at 75% of capacity.

The Central CPP produces a very consistent clean coal product, averaging on an as-received basis between 12,900 to 13,000 Btu per lb, 2.0 to 2.5% sulfur, and 7.0% to 8.0% ash. The plant's ability to blend raw coal production from the three underground mines into a singular plant feed allows for both more consistent plant operation and coal product qualities.

14.3 Future Operations

CONSOL intends to utilize the Central CPP to process coal from the PAMC underground LW mines throughout the complex's LOM plan.

14.4 Conclusions

Based on our review of historical processing data and forecasts of future production, it is BOYD's opinion that the present processing methods found at Central CPP will be sufficient for currently anticipated coal processing at PAMC.

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15.0 MINE INFRASTRUCTURE

15.1 Mine Surface Facilities

Operations at PAMC are supported by several surface facilities located within the areal proximity of the mine reserve boundary. Major surface infrastructure elements include: engineering and business offices, personnel bathhouses, parking areas, supply yards, warehouse buildings, ventilation fan structures, ventilation air shafts, high voltage power distribution stations, ROM coal conveyor belt structure, and primary underground access points, including slope tunnels (for transporting supplies underground/conveying ROM coal to the surface) and mine portals (shafts for transporting employees underground). Figure 3.1 (Page 3-2) provides a general location map highlighting the layout of the three PAMC underground mines and the surface location of their primary deep mine access points. Each of the PAMC underground LW mines maintain their own separate surface facilities. In terms of industry standards, the PAMC operations' surface infrastructure is comparable to or superior to facilities typically found within the Pittsburgh Seam mining region.

The current surface facilities located at each of the mines are well constructed and have the necessary capacity/capabilities to support the PAMC's near-term mining plans. Longer term, as the individual mines progress beyond their near-term mine plans and the location of future mining activities is centered outside the physical and/or operational limitations of the existing infrastructure, additional surface facilities of comparable design will be required to support continued mining (refer to Chapter 18 for a discussion regarding expectations for future capital expenditures).

Given CONSOL's demonstrated ability to steadily construct its expanding surface facility infrastructure in a timely fashion (relative to underground mine production), the need for continued surface facilities at select mines of PAMC is not seen as a hindrance for the execution of the LOM plans.

All ROM output from the PAMC mines is processed in the Central CPP, which is discussed in Chapter 14.

15.2 Bailey Refuse Facility

The Bailey refuse facility serves as the disposal location for all waste rock (coarse coal refuse) and fine coal slurry (fine coal refuse) produced during the processing of ROM coal from the three PAMC underground LW mines. The current Bailey refuse facility

encompasses approximately 3,509 permitted acres adjacent to the Central CPP. A summary of the currently permitted coal refuse disposal areas (CRDA) is provided in Table 15.1:

Table 15.1: CRDA Summary

CRDA	Permitted Area (acres)		
	Refuse	Supporting	Total
	Disposal Area	Activity Area	
No. 1 & 2	402	483	885
No. 3 & 4	373	184	557
No. 5 & 6	448	170	618
No. 7 & 8	837	612	1,449
Total	2,060	1,449	3,509

CRDA No. 7, the most recent permitted disposal site, received approval from the PA-DEP in August 2020. A permit application for CRDA No. 9 was submitted in January 2024 and is pending approval.

The Bailey refuse facility includes multiple disposal areas for coarse coal refuse and fine coal refuse disposal. Table 15.2 details the inventory of CRDA sites servicing the PAMC operations as of December 2024.

Table 15.2: Summary of Remaining Coal Refuse Capacity

CRDA	Remaining Capacity (Cubic Yards)	
	Coarse Refuse	Fine Refuse
No. 1	74,000	-
No. 2	5,641,000	-
No. 5	39,872,000	-
No. 6	3,002,000	-
No. 7	69,600,000	83,000,000
No. 8	20,730,000	17,200,000
Total	138,919,000	100,200,000

According to forecasted LOM coal refuse disposal requirements, currently permitted refuse areas can accommodate coarse coal refuse disposal (properly staged) through 2035 while fine coal refuse disposal can be accommodated through 2040. Successful permitting of CRDA No. 9 will extend both coarse and fine coal refuse capacity.

CONSOL indicated that the refuse disposal plan post-2035 will be based on proven practices and approaches. CONSOL has historically demonstrated the ability to steadily acquire the required land for the refuse facility, associated permits, and to execute construction of disposal areas in a timely fashion. It is BOYD's opinion that CONSOL's staged refuse disposal through 2035 will meet or exceed the practices demonstrated by other industry peers. At this time, the absence of a staged and detailed refuse disposal plan post-2035 is not seen as a major hindrance to PAMC meeting its LOM plans.

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16.0 MARKET STUDIES

16.1 Product Specifications

The PAMC produces a thermal coal that is sold into the domestic US and international export markets. Indicative quality specifications for the PAMC thermal product are listed in Table 16.1 below.

Table 16.1: Indicative Thermal Coal Quality

Parameter	Units	Value
Moisture	%, arb	6.15
Ash	%, arb	7.5
Fixed Carbon	%, arb	51.2
Volatile matter	%, arb	36.5
Sulfur	%, arb	2.3
Heating Value	Btu/lb, arb	12,950
Heating Value	Btu/lb, MAF	15,000
SO ₂	lbs/MMBtu, arb	3.6
HGI		54

The high calorific value thermal coal produced by PAMC is currently used in the United States by electricity generators located in the PJM Interconnection, Southeast, and Midcontinent Independent System Operator regional electricity markets and by domestic industrial customers. In addition to the domestic market, PAMC also services international power generation and industrial customers in Europe, Africa, Asia, and other parts of North America. The coal's high quality enables it to receive premium pricing relative to regional price indices³.

The PAMC also supplies lesser quantities—approximately 2.0 to 3.0 million tons per annum—of a secondary metallurgical coal product into the international export market.

³ The main value driver for thermal coal is always energy or heat content, typically measured as a calorific value. With a typical heating value of 12,950 Btu/lb., PAMC's thermal coal is among the highest heat content US bituminous coals. In the international market, PAMC's thermal coal, which typically converts to 6,900 kcal/kg net as received (NAR), surpasses the major international bituminous coal benchmark products (e.g., the Republic of South Africa's [RSA] benchmark Richards Bay 6,000 kcal/kg NAR thermal product or Australia's Newcastle 6,000 kcal/kg NAR benchmark thermal coal) and is typically benchmarked against the API 2 index (6,000 kcal/kg NAR coal delivered into the Amsterdam, Rotterdam region in the Netherlands, and Antwerp region in Belgium)

Indicative quality characteristics for the PAMC metallurgical coal product are detailed in Table 16.2.

Table 16.2: Indicative Metallurgical Coal Quality

Parameter	Units	Value
Moisture	%, arb	6.3
Ash	%, db	7.8
Volatile matter	%, db	37.5
Sulfur	%, db	2.0-2.6

Due to its higher sulfur and high volatile matter contents, high fluidity, and a reflectance value less than 0.9%, PAMC's metallurgical coal product is ranked as a cross-over coking coal. This grade of metallurgical coal generally displays strong thermoplastic properties (e.g., fluidity), but its lower rank and higher sulfur content constrain its use in coking coal blends relative to premium coking coals. Despite its lower rank, PAMC has successfully marketed its metallurgical coal product to steel makers in South America (primarily Brazil), Asia, and Europe.

16.2 Primary Markets

A summary of PAMC's historical coal sales by product, market, and segment for 2020 through 2023 is provided in Table 16.3, below.

**Table 16.3: PAMC Sales by Product and Market Segment
(Tons 000)**

	2020	2021	2022	2023
Domestic				
Thermal	11,811	12,588	13,556	10,299
Export				
Thermal	5,786	9,887	9,059	13,164
Metallurgical	1,075	1,245	1,489	2,579
Subtotal	6,861	11,132	10,548	15,743
Total	18,672	23,720	24,104	26,042
	Percent of Total Sales			
Thermal	94.2	94.8	93.8	90.1
Metallurgical	5.8	5.2	6.2	9.9
	100.0	100.0	100.0	100.0

Source: CONSOL

PAMC's primary focus is on growing sales into the export, industrial, and metallurgical segments while continuing to serve its key domestic customers.

16.2.1 Domestic Sales

A summary of PAMC thermal coal sales into the domestic market (i.e., US generating stations and industrial customers) during the period 2021 through year-to-date October 2024 (most recent as of the time of this report), as reported by the U.S. Energy Information Administration (EIA), is shown in Table 16.4 below.

Table 16.4: Summary of PAMC Historical Thermal Coal Deliveries by State (Tons 000)

	2021		2022		2023		YTD October 2024		Total Deliveries 2021 - Oct 2024	
	Tons (000)	% of Total	Tons (000)	% of Total	Tons (000)	% of Total	Tons (000)	% of Total	Tons (000)	% of Total
	PA	4,028	31.0	4,527	34	1,923	19	1,669	19.8	12,148
NC	3,239	25.0	2,952	22.0	1,899	18.8	2,209	26.3	10,299	22.9
MD	1,260	9.7	826	6.2	561	5.6	179	2.1	2,826	6.3
MI	692	5.3	615	4.6	528	5.2	779	9.3	2,613	5.8
GA	893	6.9	730	5.4	1,088	10.8	573	6.8	3,285	7.3
SC	1,111	8.6	1,539	11.5	1,675	16.6	1,100	13.1	5,425	12.1
WV	996	7.7	1,369	10.2	1,617	16.0	1,682	20.0	5,665	12.6
WI	469	3.6	562	4.2	700	6.9	223	2.7	1,954	4.3
NJ	288	2.2	143	1.1	-	-	-	-	430	1.0
DE	-	-	144	1.1	95	0.9	-	-	239	0.5
NH	-	-	21	0.2	10	0.1	-	-	31	0.1
Total	12,976	100	13,427	100	10,098	100	8,414	100	44,915	100

Source: EIA Form923.

According to EIA data, PAMC shipped thermal coal to 8 states from January through October 2024. From January 2021 through October 2024, PAMC customers in the top three sales states (Pennsylvania, North Carolina, and Maryland) were delivered over 25 million tons or 56% of the complex's total sales during that period.

16.2.2 Export Sales

The PAMC also sells a significant amount of its coal outside the United States. The company's participation in the export market is influenced by several factors, including: prevailing international price indices, ocean freight tariffs, the status of the global supply/demand balance, and price premium and/or discounts that PAMC's products receive in the market because of the beneficial or detrimental qualities that its coal will afford its end users relative to benchmarks (i.e., the "value in use" proposition). The extent to which these factors influence PAMC's export sales will vary from year to year, by customer and region. PAMC's presence in the international thermal and metallurgical coal market has grown over the past five years, reflecting global demand for the

products produced by PAMC, CONSOL's well-established international sales network, as well as developing trends/behaviors within the export market, including:

- As sales into the domestic thermal market have declined over the recent past (reflecting the United States' growing shift away from coal-fired generation towards other competing forms of generation), PAMC has steadily increased shipments into the international market. As developing economies expand their portfolio of thermal coal suppliers, utility and industrial customers in these regions are recognizing the value that high quality thermal coals—like the product produced by PAMC—provides to their operations.
- PAMC thermal coal competes with Illinois Basin coals in the European and Indian thermal markets. Due to its higher heating value, lower sulfur content, and transportation cost advantage, PAMC coal is highly competitive versus Illinois Basin products (which are exported through the US Gulf Coast) into these markets. Despite this advantage, PAMC can only profitably compete in certain international thermal coal markets so long as benchmark pricing⁴ supports the transaction.
- PAMC's metallurgical product is directed into the international market where steel producers commonly utilize high fluidity, low reflectance, and relatively high sulfur content metallurgical coal. Normally priced at a discount to higher rank US met coal products, PAMC met product is viewed as a low-cost blend material, routinely utilized by steel makers seeking to reduce their overall raw material expenditures (to the extent such moves are economically and technologically practical). PAMC's presence in the international met market has been enhanced by CONSOL's use of an internationally recognized third-party coal sales agent. Future sales into this sector are expected to range between 2.0 to 3.0 million tons annually.

PAMC's sales into the export market are advantaged by its access to the CONSOL Marine Terminal. The Terminal, located in the Port of Baltimore, features high-speed, high-capacity equipment that transloads coal from rail cars to ocean-going vessels. With an annual throughput capacity of approximately 19 million tons and on-site ground storage of approximately 1.1 million tons, the terminal is uniquely serviced by both the NS and CSX railroads. According to CONSOL, PAMC coal shipped through the Terminal has been directed to markets in Africa, Europe, North America, South America, and Asia.

⁴ In the case of shipments into Europe, the delivered price of PAMC coal (including the cost of the coal at the mine, rail, port, and ocean freight charges and high-sulfur pricing discounts) must be comparable to the API2 index price which reflects the cost-insurance-freight coal price to the port of Amsterdam-Rotterdam-Antwerp on a metric ton basis.

16.3 Market Outlook

16.3.1 Future Demand

Coal use among domestic US power generators has declined as competition from natural gas and renewable forms of power generation has increased. In response to this development, CONSOL anticipates its domestic thermal markets will continue to erode over the mid- to long-term, in line with coal plant retirements and the associated drop in coal demand. Offsetting much of this decline is CONSOL's expectation of an expanded role for PAMC thermal coal in the international market. Additionally, CONSOL reasonably anticipates PAMC metallurgical coal will continue to find acceptance in the export market at levels slightly above current sales.

16.3.2 Price Forecast

The global coal market is continuously influenced by a multitude of factors which serve to dictate pricing for both thermal and metallurgical coal. As a major supplier of both products to the domestic US and international export markets, PAMC is not immune to these pricing factors. For the purposes of this analysis, BOYD assumed PAMC will continue to supply both thermal and metallurgical coal, with thermal coal remaining PAMC's primary product sold into the market. BOYD's price forecast, which reflects a blend of both thermal and metallurgical coal, is shown in Table 16.5.

Table 16.5: Coal Price Forecast

Period	Year	Coal Sales (000 tons)	Sales Price (\$/ton)
1	2025	26,003	65.10
2	2026	25,804	60.10
3	2027	26,135	59.10
4	2028	26,617	61.10
5	2029	26,617	62.10
6	2030	25,715	61.50
7	2031	25,702	60.80
8	2032	25,004	60.90
9	2033	19,876	61.30
10	2034	19,826	61.40
11-20	2035-2044	170,247	61.23
21-30	2045-2054	106,705	61.28
30-37	2055-2061	33,443	61.20
Total/Average		557,694	61.29

BOYD anticipates the FOB mine price for PAMC coal will range from \$59.10 to \$65.10 per ton, with an average price of \$61.29 per ton over the 37-year LOM plan.

17.0 PERMITTING AND COMPLIANCE

17.1 Permitting Requirements and Status

Numerous permits are required by federal and state law for underground mining, coal preparation and related facilities, and other incidental activities. In Pennsylvania and West Virginia, responsibility for regulating these activities primarily lies with the PA-DEP and WV-DEP and their various subdivisions, respectively. Primary requirements for the PAMC include Coal Mining Activity Permits (CMAP) and Coal Refuse Disposal Permits (CRDA). Associated with these permits are numerous National Pollutant Discharge Elimination System (NPDES) permits which regulate air and water quality and US Army Corps of Engineers' Section 404 permits which regulate the discharge of material into waterways. Several other minor permits or licenses may be required to regulate the storage of explosives, petroleum, and hazardous materials.

BOYD reviewed the permits for the PAMC that are necessary for continued operations. Such required permits appear to be valid and in good standing. The approved permits and certifications are adequate for the continued operation of the facilities. A summary of the salient permits for the PAMC is provided in Table 17.1, on the following page.

New permits and/or permit revisions/amendments may be necessary from time to time to facilitate future operations. Given sufficient time and planning, we believe CONSOL should be able to secure new permits, as required, to maintain its planned operations within the context of the current regulations. Continuously increasing efforts are required to obtain permits for LW mining and related activities in Pennsylvania and West Virginia. The primary contributing factors are the effects of subsidence on overlying streams and the ability to permit refuse sites.

Permits generally require that the permittee post a performance bond in an amount established by the regulator program to: (1) provide assurance that any disturbance or liability created during mining operation is properly mitigated, and (2) assure that all requirements of the permit are fully satisfied. CONSOL reports holding surety

bonds totaling nearly \$380 million to cover its current obligations relating to mining and reclamation, road repair, etc.

Table 17.1: Permit Summary

Permit / Registration / Authorization	Permit / ID No.	Regulatory	
		Agency	Expiration Date
<i>MSHA Mine Identification Numbers</i>			
Bailey Mine	3607230	MSHA	None
Enlow Fork Mine	3607416	MSHA	None
Harvey Mine	3610045	MSHA	None
Central Coal Preparation Plant	3610437	MSHA	None
<i>Coal Mining Activity Permits (CMAP)</i>			
Bailey Mine	30841316	PA-DEP	8/27/2025
	U200601	WV-DEP	3/11/2028
Enlow Fork Mine	30841317	PA-DEP	1/29/2026
Harvey Mine	30121301	PA-DEP	<i>Pending Renewal</i>
<i>Coal Refuse Disposal Areas (CRDA)</i>			
Refuse Areas #1 and #2	30810703	PA-DEP	<i>Pending Renewal</i>
Refuse Areas #3 and #4	30020701	PA-DEP	<i>Pending Renewal</i>
Refuse Areas #5 and #6	30080701	PA-DEP	6/6/2025
Refuse Areas #7 and #8	30130701	PA-DEP	<i>Pending Renewal</i>
Refuse Area #9	30240700	PA-DEP	<i>Pending Approval</i>

* Regulatory Agencies

MSHA: Mine Safety and Health Administration

PA-DEP: Pennsylvania Department of Environmental Protection

WV-DEP: West Virginia Department of Environmental Protection

17.2 Environmental Studies

It is BOYD's understanding that no standalone environmental studies have been conducted for the PAMC. As part of the state and federal permitting process, various environmental assessments have been conducted and reviewed by the relevant local, state, and federal agencies. As the necessary permits for mining and processing operations have been issued, it is BOYD's understanding that all environmental assessments have been accepted by the relevant regulatory bodies and no material issues were found.

17.3 Waste Disposal and Water Management

Waste disposal facilities are in place for current processing operations, with plans to expand the disposal facilities as required to meet life of reserve storage requirements. Please refer to Section 15.2 for a detailed description of these facilities.

The underground mines are below drainage with shaft/slope access. Such mines are designed and permitted to avoid water break out and acid mine discharge. The potential for discharge of acid mine drainage at underground mines is limited to minor run off from disposal and other surface sites.

Water control structures are in place and function as required by regulatory agencies. All runoff from the slurry impoundment(s) is managed by sediment control structures including diversions, sumps, and sediment basins. Prior to discharge from the permitted areas, water must meet compliance standards as defined in the NPDES permits. Water samples at discharge locations are collected in accordance with the approved permit and analyzed by an independent laboratory.

17.4 Compliance

CONSOL reports having an extensive environmental management system and compliance process.

In its 2023 corporate sustainability report, CONSOL summarizes its annual environmental performance as follows:

- Over 99.9% environmental compliance with NPDES permit requirements.
- Recycling 794 million gallons of water at operations.
- Treating and discharging 15,152 million gallons of water.
- Receiving only 18 agency-issued violation notices and paying \$224,224 in environmental penalties.
- Spending over \$69 million on environmental expenditures, including \$4.1 million on voluntary greenhouse gas reduction initiatives.

Based on our review of information provided by CONSOL, it is BOYD's opinion that CONSOL has a generally typical coal industry record of compliance with applicable mining, water quality, and environmental regulations. BOYD is not aware of any regulatory violation or compliance issue that would materially impact the coal reserve estimate.

17.5 Plans, Negotiations, or Agreements

New permits and certain permit amendments/revisions require public notification. The public is made aware of pending permits by advertisement in local newspapers. Additionally, a copy of the application is retained at the local county's public library for review. A comment period follows the last advertisement date to allow the public to submit comments to the regulatory authority.

BOYD is not aware of any community or stakeholder concerns, impacts, negotiations, or agreements that would materially impact the coal reserve estimate.

17.6 Mine Closure

A detailed plan for reclamation activities upon completion of mining required at the PAMC has been prepared. Given the application of underground mining methods at the operation, the disturbed acreage on the surface is relatively limited. The primary reclamation liabilities are associated with the refuse disposal sites.

Mine site reclamation costs are funded from CONSOL's Asset Retirement Obligations (ARO) account. Funding of the ARO account is included in the PAMC's operating costs discussed in Chapter 18 and included in the economic analysis presented in Chapter 19. ARO costs estimates are reviewed annually and currently estimated at approximately \$55.6 million for the PAMC. In BOYD's opinion, the estimated reclamation liability is adequate to estimate mine closure and reclamation costs at the property.

17.7 Socio-Economic Impact

CONSOL's 2023 corporate sustainability report outlines the components of its core sustainability initiatives. Its stated financial priorities include continued support of local economic prosperity, regular stakeholder engagement, and creation of opportunities for the local communities.

BOYD is not aware of any community or stakeholder concerns, impacts, negotiations, or agreements which would materially impact the coal reserve estimate.

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18.0 CAPITAL AND OPERATING COSTS

18.1 Introduction

BOYD independently developed estimates of future operating and capital costs to determine that in BOYD's opinion, extraction of the coal reserves of PAMC are economically viable. BOYD's calculations and determinations included in this chapter are based on what BOYD believes to be reasonable, appropriate, and relatively conservative investment and market assumptions and estimates, including all assumptions made about future prices and market conditions, production and sales volumes, operating costs, capital expenditures and other results and measures that are necessary and are used to determine the economic viability of the reported coal reserves.

BOYD's assumptions and estimates have been calculated and presented in this report solely for the purpose of confirming that future extraction of the coal reserves of PAMC are economically viable as required under S-K 1300. BOYD's estimates and assumptions underlying the discounted cash flow analysis (presented in the following chapter) and other calculations are based on future estimates of spot prices, PAMC historic performance from 1984 through December 31, 2024, BOYD's extensive knowledge of the Pittsburgh Seam, assumed future production at PAMC using multiple LWs as well as other assumptions and estimates detailed in this chapter. Actual future operating results and investment and market conditions may differ significantly from PAMC historic results or from the estimates of future investment and market conditions as well as from future PAMC performance assumed by BOYD in the discounted cash flow analysis as a result of various factors and risks, some of which may be outside of CONSOL's control. CONSOL, as with all coal mining companies, actively evaluates, changes, and modifies business and operating plans in response to various factors that may affect PAMC production, operations, and financial results. Actual PAMC future results, production levels, operating expenses, number of operating LWs and CMs, sales realizations, and all other modifying factors could vary significantly year to year from the assumptions and estimates used by BOYD in the calculations presented in this chapter.

In terms of the combination of productivity, cost, and production volumes, CONSOL's PAMC complex is the preeminent underground coal operator within the Pittsburgh Seam. Comprised of three state-of-the-art underground LW mines, PAMC is among the largest underground sources of coal production in the United States. The complex's ability to consistently achieve high levels of annual output at generally low operating costs is attributed to its highly capitalized LW operations and financial controls.

The following sections provide a review of recent historical operating costs and capital expenditures for the PAMC complex. A discussion of BOYD’s outlook for the complex over the five-year period 2023 to 2027, including projected production and sales, operating costs, and capital expenditures, is also provided.

18.2 Historical Financial Performance

18.2.1 Historical Operating Costs

The following figure (Figure 18.1) presents PAMC’s historical operating costs and average annual realizations for the period 2020 through 2024:

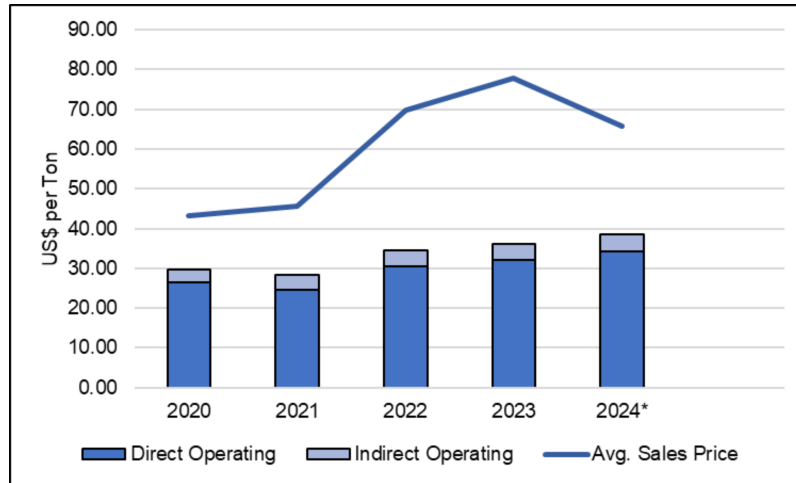


Figure 18.1
PAMC Historical Operating Costs and Sales Realizations

Note: Indirect costs include SG&A, but exclude interest expense and DD&A.
Results for 2024 include the 11-month period ending November 30.

Over the five-year period, the complex’s average annual operating costs ranged from approximately \$28 to \$40 per ton. The increase in the average operating costs after 2021 has been offset by the increase in the average sales prices.

Cost performance for the individual mines is portrayed graphically in Figure 18.2, below.

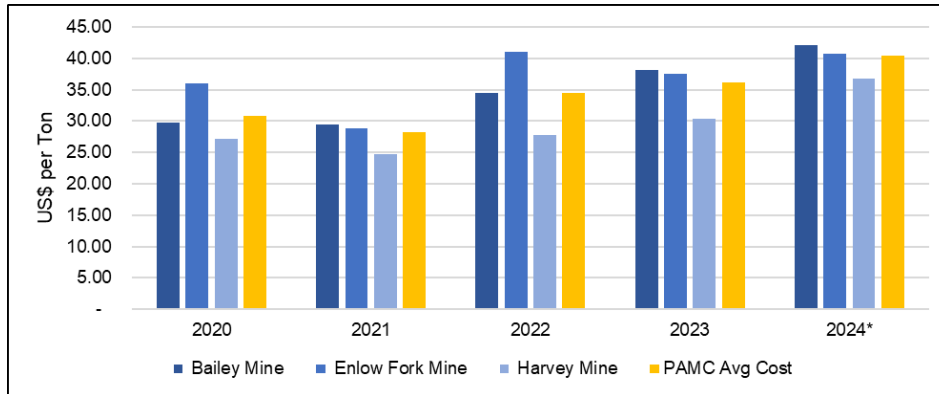


Figure 18.2
PAMC Historical Cash Operating Cost by Mine

Note: Results for 2024 include the 11-month period ending November 30.

Historically Bailey, Enlow Fork, and Harvey have had relatively low operating costs in comparison to other industry producers. Salient factors influencing the mines' recent performance include:

- Of the three PAMC underground LW mines, Harvey has demonstrated the lowest annual operating cost during the 2020 to 2024 period—ranging from \$25 to \$37 per sold ton and averaging \$29 per sold ton. Unlike Bailey and Enlow Fork, which operate multiple LW faces, the Harvey Mine employs a single LW, thus limiting the mine's potential gains through economies of scale⁵. However, Harvey is the newest of the three PAMC LW mines. As a result, it supports less infrastructure and mine workings than Bailey and Enlow Fork, thus avoiding the costs associated with maintaining an expansive underground infrastructure.
- Enlow Fork's annual cash operating costs during 2020 through 2024 ranged from \$29 to \$41 per sold ton, averaging approximately \$37 per sold ton over the five-year period.
- Bailey Mine annual cash operating costs during 2020 through 2024 ranged from \$30 to \$42 per sold ton, averaging approximately \$42 per sold ton over the five-year period.

⁵ Economies of scale are of fundamental importance; a mine that has a productive year versus its budgeted plan can expect to have low unit costs while surpassing projected margins. Alternatively, a LW mine that achieves poor production levels would see a proportional reduction in revenue, but this would not be accompanied by a corresponding reduction in total costs. Such a mine would instead see high unit costs, and most of the revenue loss would flow through to the bottom line.

18.2.2 Historical Capital Expenditures

Relative to industry peers, the three PAMC underground LW mines and supporting centralized preparation facility are highly capitalized, state-of-the-art operations which have benefited from CONSOL's continual attention to capital upgrade/replacement programs and routine investment in mine infrastructure expansions, maintenance of production equipment, refuse placement, etc. A summary of the 2020 to 2024 historical capital expenditures for PAMC (including the three underground LW mines and Central CPP) is provided in Table 18.1.

Table 18.1: PAMC Historical Capital Expenditures (\$000)

2020	2021	2022	2023	2024*
64,085	95,945	107,401	104,550	136,079

* Through November 30, 2024

It is BOYD's experience that operations such as PAMC will have annual maintenance of production capital expenditures ranging between \$4.00 and \$6.50 per ton in any given year, with variations based on mine plan, mining conditions, rebuild and replacement schedules, equipment markets, etc. This is consistent with CONSOL historical performance and likely future capital requirements for continued operations.

18.3 Projected Mine Plan and Estimated Costs

BOYD's projected mine plan for the PAMC is based on engineered mine layouts⁶ which were designed for optimum reserve recovery, using efficient mining methods and practices⁷. Historical operating performance parameters and mining rates were applied to the mine plan to develop coal production and mining schedules. Financial budgets were then prepared

⁶ Mining plans for large LW mines are simple but relatively inflexible, as major modifications to these mine plans require significant foresight and planning well in advance of mining. The entire foundation of the mining plan is based upon economies of scale resulting from a defined mining plan with high levels of annual output through all projected areas. CONSOL's LW panels are large, typically measuring 1,300 ft to 1,600 ft in width and up to 15,000 ft in length, which equates to approximately 5 million product tons of coal per panel. This approach minimizes the percentage of high-cost CM output relative to low-cost LW coal.

⁷ LW mines are supported by CM units that develop the main, submain, and gate entries that provide underground roadways for transportation access, ventilation, and mine infrastructure. CM units contribute between 5% and 20% of total tonnage at a typical LW mine (with the LW being the primary production unit), but represent a significant portion of a mine's cost structure. CM development and associated construction and mine support activities must be performed in advance of the LW face in order to maintain annual levels of output. It is BOYD's opinion that CONSOL's approach to gate development and support activities, which are managed as an integrated portion of the overall mining cycle, are regarded as efficient and well organized.

(based on mine plan outputs and labor requirements), resulting in operating cost forecasts. The individual mining plans recognize the impact of variations in physical mining conditions, mechanical failures, and operational activities that can temporarily disrupt production activities. BOYD believes the plans developed for PAMC are reasonable and achievable, provided no major abnormalities are encountered.

Forecasting performance based on the continuation of consistent mining conditions, excluding impacts from unforeseen events, increases the risk of underperformance versus the mine plan. BOYD's approach does not directly account for situations that can occur in underground coal mining, such as fire, water inundations, geological anomalies, etc. Risk mitigation is factored into the forecasted production schedule by projecting an operating level sustained by the use of multiple LW faces.

BOYD's mine plan assumes no major abnormalities are encountered within the coal market or at the individual mine level. The forecasted operating and capital costs per saleable ton align with LW coal mines operating in the Pittsburgh Seam region. BOYD believes the extended LOM projections of operating and capital costs to be accurate to within $\pm 25\%$. We did not assign a contingency budget to the extended LOM projection estimates.

18.3.1 Forecasted Production and Sales

The mine production and financial projections reflect sustained annual sales volumes from PAMC as coal prices are expected to remain strong. The forecast reflects a stable revenue stream, driven by BOYD's view that CONSOL's Pittsburgh Seam reserves and PAMC are in a strong competitive position to take advantage of improved coal pricing

and demand. BOYD’s projected saleable production for the PAMC (which assumes that all of the complex’s output will be available for sale) is provided in Figure 18.3.

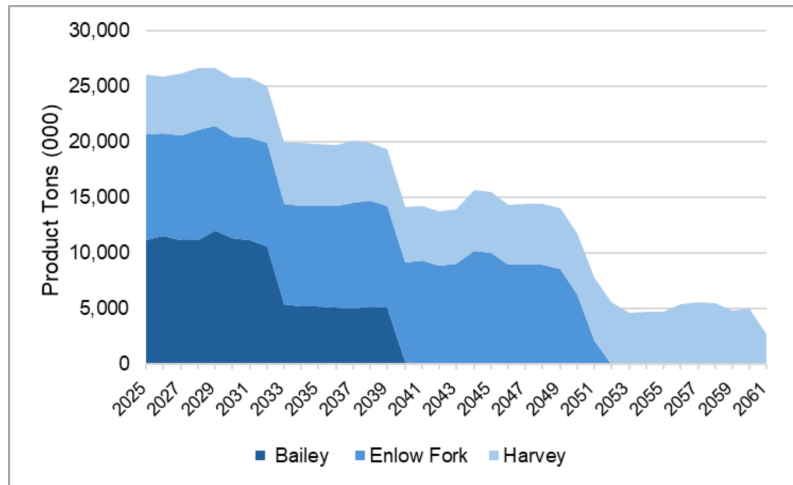


Figure 18.3
Projected PAMC Saleable Production

PAMC’s future production over the life of the reserves will remain well within the complex’s previously achieved output levels and in line with current infrastructure capacities and capabilities.

18.3.2 Forecasted Operating Costs

BOYD anticipates PAMC will continue to incur relatively stable operating costs over the life of the operations. This primarily reflects consistent performance from the operations’ LW faces, with production ranging from 25 to 26 million tons annually over the next

years, followed by decreases as each of the mines' coal reserves are exhausted. Operating costs per ton sold for the next five years are shown in Figure 18.4.

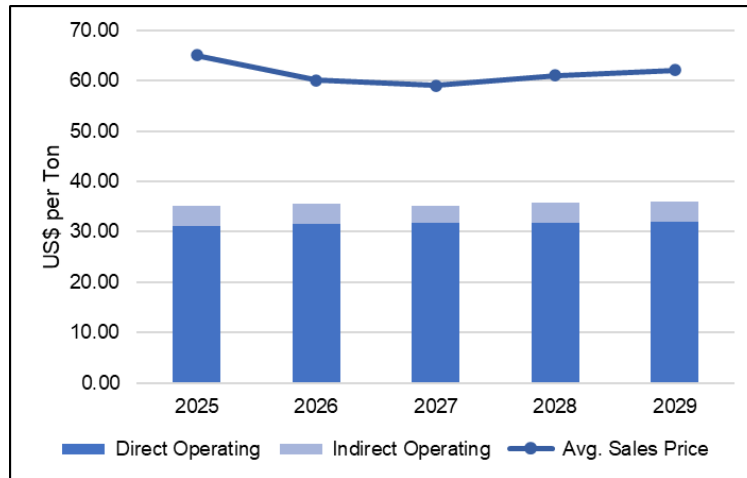


Figure 18.4

PAMC Projected Operating Costs and Sales Price

Notes: Indirect costs include SG&A, but exclude interest expenses and DD&A.

PAMC's average cash operating costs over the remaining life of the reserves is expected to be consistent with its historical performance.

18.3.3 Forecasted Capital Expenditures

BOYD projects PAMC will increase its level of capital expenditures over the next three years, with spending focused on mine infrastructure expansion (air shafts, buildings, belt systems, etc.), maintenance of production equipment (new equipment purchases and/or rebuilds), and refuse area infrastructure. Capital expenditure appears to be logical and consistent with CONSOL's typical level of capitalization and maintaining of state-of-the-art LW and associated processing facilities.

In general, the projected capital expenditures over the life of the coal reserves are informed by general engineering principles and are consistent with industry norms. BOYD considered the estimated capital expenditures reasonable and appropriate.

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19.0 ECONOMIC ANALYSIS

19.1 Introduction

The economic analysis presented in this chapter was prepared by BOYD for the purpose of confirming the commercial viability of the PAMC's reported coal reserves and not for the purpose of valuing the PAMC, or its assets. The economic analysis contains forward-looking information related to the projected operating and financial performance of the PAMC. This projection involves inherent known and unknown risks and uncertainties, some of which may be outside of CONSOL's control. CONSOL, as with all mining companies, actively evaluates, changes, and modifies business and operating plans in response to various factors that may affect operational and/or financial results. Actual results, production levels, operating expenses, sales realizations, and all other modifying factors could vary significantly from the assumptions and estimates provided in this analysis. Risk is subjective, as such, BOYD recommends that each reader should evaluate the project based on their own investment criteria.

The financial model used for the purposes of the economic analysis forecasts future free cash flow from coal production and sales over the remaining life cycle of the PAMC using the annual forecasts of production, sales revenues, and operating and capital costs discussed earlier in this report. A DCF analysis, in which future free cash flows are discounted to present value, is used to derive an NPV for the coal reserves. The use of DCF-NPV analysis is a standard method within the mining industry to assess the economic value of a project after allowing for the cost of capital invested.

The financial evaluation of the PAMC has been undertaken on a simplified after-tax basis and does not reflect CONSOL's corporate tax structure. NPV is calculated using an after-tax discount rate of 12% (NPV₁₂). Cash flows were assumed to occur at the end of each year and are discounted to January 1, 2025. Cost estimates and other inputs to the cash flow model for the project have been prepared using constant 2024 money terms, i.e., without provision for inflation. The internal rate of return and project payback were not calculated, as there was no initial investment (sunk costs) considered in the financial model provided herein.

It is BOYD's opinion that the financial model provides a reasonable and accurate reflection of the PAMC's expected economic performance based on the assumptions and information available at the time of our review.

19.2 Assumptions and Limitations

Cash flow projections for the PAMC have been generated from the annual forecasts of production, sales prices, and operating and capital costs discussed earlier in this report. A summary of the key assumptions and limitations is provided below:

- Production quantities are based on LOM plans for the PAMC. BOYD has assumed that all necessary rights and approvals will be obtained in advance of mining. We have assumed that all clean coal tons produced would be sold in that year (i.e., saleable production equates to total tons sold in the year).
- Forecasted revenues are based on BOYD's blended sales price forecast for washed thermal and crossover metallurgical coal products from the PAMC's CPP (i.e., at the mine). In line with historical sales, we have assumed most of PAMC's future coal production will continue to be directed into the thermal (power generation and industrial) market. Forecasted revenue also reflects the fact that PAMC sells approximately 8 to 10 percent of its output into the metallurgical market. For purposes of this analysis, BOYD has assumed PAMC sales into the met coal sector are held constant at this level (i.e., additional revenue that would be realized through increased sales into the met market have not been considered). Transportation and delivery costs are assumed to be incurred by the customer or added as a pass-through to the mine price. Market specifications and forecasted sales prices for the PAMC's saleable coal are provided in Chapter 16.
- Capital and operating costs are discussed in Chapter 18. Cash production costs include direct and indirect mining costs, including labor, material and supplies, processing, royalties and production taxes, insurance, and administrative costs. Administrative costs include sales and mine administration and corporate overhead allocations but exclude interest expense and DD&A.
- No allowance for changes in or the recapture of working capital has been made in the financial analysis as the PAMC has been in operation for many years. Exclusion of working capital from the financial analysis does not have a material impact on the NPV calculation.
- Depreciation and amortization expenses for existing assets are derived from CONSOL's depreciation schedules. Sustaining capital is depreciated on a straight-line basis.
- A combined federal and state corporate tax rate of 22% has been applied on all taxable income. All other taxes and fees are included in the estimates of operating costs.
- Asset recovery/salvage values were not included in the financial analysis.

It is BOYD's opinion that the production and financial projections provided herein are reasonable and are accurate to within $\pm 25\%$.

19.3 Financial Model Results

Estimated LOM pre-tax and after-tax cash flows for coal production from the PAMC are presented in Table 19.1 (on the following page) and summarized in Table 19.2 (below).

Table 19.2: Financial Results

Financial Metric	Remaining Life of Mine Total
Expected Remaining Life (years)	37
Saleable Coal Production (000 tons)	557,694
Total Revenues (\$ millions)	34,180
Average Sales Price (\$/clean ton)	61.29
Total Cash Operating Costs (\$ millions)	19,785
Average Cash Operating Costs (\$/clean ton)	35.48
Capital Expenditures (\$ millions)	3,467
Average Capital Expenditure (\$/clean ton)	6.22
Cash Flows (\$ millions):	
Total Pre-Tax Cash Flow	10,929
Discounted Pre-Tax Cash Flow at 12%	3,407
Total After-Tax Cash Flow	8,638
Discounted After-Tax Cash Flow at 12%	2,655

DCF-NPV on a pre-tax and after-tax basis using a discount rate of 12% was calculated utilizing the projected cash flows over various timeframes. Table 19.3 summarizes the results of the pre-tax and after-tax DCF-NPV analyses.

Table 19.3: Cumulative NPV₁₂ by Timeframe

	(\$ million)		
	15-Year	30-Year	LOM
Pre-Tax	3,055	3,392	3,407
After-Tax	2,375	2,643	2,655

The economic analysis confirms that the PAMC generates positive pre- and after-tax financial results and a real NPV₁₂ of almost \$2.7 billion. As such, it is BOYD's opinion that the coal reserves of the PAMC have demonstrated economic viability.

TABLE 19.1

DISCOUNTED CASH FLOW - NET PRESENT VALUE ANALYSIS
 PENNSYLVANIA MINING COMPLEX
 Prepared For
CONSOL ENERGY INC.
 By
 John T. Boyd Company
 Mining and Geological Consultants
 February 2025

Period	1	2	3	4	5	6 - 10	11 - 20	21 - 30	31 - 37	Total
Year	2025	2026	2027	2028	2029	2030 - 2034	2035 - 2044	2045 - 2054	2055 - 2081	
Saleable Production (000 Tons)	26,003	25,804	26,135	26,617	26,617	116,123	170,247	106,705	33,443	557,694
Realization (\$/Ton)	65.10	60.10	59.10	61.10	62.10	61.16	61.23	61.28	61.20	61.29
Revenue (\$000)	1,692,795	1,550,820	1,544,579	1,626,299	1,652,916	7,102,613	10,424,303	6,536,769	2,046,712	34,179,804
Cash Operating Costs (\$000)										
Direct	810,041	813,751	831,064	847,439	852,120	3,715,797	5,584,957	3,220,458	1,110,327	17,785,954
Indirect	104,245	102,116	86,652	106,909	107,650	465,413	610,469	306,953	104,388	1,994,796
SG&A	170	155	139	193	194	837	1,252	723	260	3,924
Total Cash Operating Cost	914,456	916,022	917,855	954,542	959,964	4,182,048	6,196,677	3,528,134	1,214,976	19,784,674
DD&A (\$000)	179,595	175,245	176,987	183,284	188,183	822,355	1,252,298	742,827	262,646	3,983,420
Gross Pre-Tax Income (\$000)	598,745	459,553	449,737	488,473	504,769	2,098,211	2,975,328	2,267,806	569,091	10,411,713
Income Taxes (\$000)	131,724	101,102	98,942	107,464	111,049	461,806	654,572	498,917	125,200	2,290,577
Gross After-Tax Income (\$000)	467,021	358,451	350,795	381,009	393,720	1,636,605	2,320,756	1,768,889	443,891	8,121,136
Capital Expenditures (\$000)	228,924	299,957	250,765	157,015	143,814	642,144	946,455	604,811	192,745	3,466,630
Net Pre-Tax Cash Flow (\$000)	549,415	334,841	375,958	514,742	549,138	2,278,421	3,281,170	2,405,824	638,991	10,928,501
Net After-Tax Cash Flow (\$000)	417,692	233,740	277,017	407,278	438,089	1,816,815	2,626,599	1,906,905	513,792	8,637,927
Pre-Tax DCF - NPV at 12% (\$000)	490,549	266,933	267,600	327,128	311,596	948,552	621,871	157,994	14,279	3,406,502
After-Tax DCF - NPV at 12% (\$000)	372,939	186,336	197,175	258,833	248,584	756,282	497,987	125,119	11,486	2,654,741

\\lb-7\boyd\ENG_WP\2755.102 CEI - PAMC 24\WP\Report\Table_DCF.xlsx\Table 19.1

In addition to the assumed base coal pricing, BOYD ran sensitivities with upside (+10%) and downside (-10%) pricing scenarios. Table 19.4, below, provides a comparison of 15-year, 30-year, and LOM DCF-NPVs at different discount rates and pricing scenarios.

Table 19.4 DCF-NPV Sensitivity Analysis

Timeframe / Scenario	Pre-Tax DCF-NPV (\$ million) by Discount Factor			
	10%	12%	15%	18%
15-Year				
Upside (+10%)	4,523	4,072	3,520	3,083
Base	3,397	3,055	2,638	2,307
Downside (-10%)	2,272	2,040	1,757	1,533
30-Year				
Upside (+10%)	5,158	4,509	3,775	3,235
Base	3,887	3,392	2,834	2,424
Downside (-10%)	2,618	2,277	1,895	1,615
LOM				
Upside (+10%)	5,193	4,528	3,782	3,238
Base	3,913	3,407	2,840	2,427
Downside (-10%)	2,636	2,287	1,899	1,617

As shown, the PAMC coal reserves are economically viable under a range of coal pricing scenarios.

In both the upside and downside sensitivity cases, no adjustments were made by BOYD to the base operating scenario. While BOYD realizes that CONSOL would likely execute short-term fluctuations in production levels in order to minimize the impact of low coal pricing and/or maximize the opportunity of high coal pricing, we opine that such minor adjustments are likely to be immaterial to the economic viability of the PAMC's coal reserves.

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20.0 ADJACENT PROPERTIES

As illustrated in Figures 1.1 and 3.1, the PAMC is surrounded by several adverse and CONSOL-controlled mining properties. As shown, the Pittsburgh coal seam has been extensively mined within and surrounding the PAMC. CONSOL's mine plans include sufficient barrier zones to mitigate any risk associated with current and prior mining activities on the adjacent properties.

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21.0 OTHER RELEVANT DATA AND INFORMATION

BOYD is not aware of any additional information which would materially impact the coal reserve estimates reported herein.

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22.0 INTERPRETATION AND CONCLUSIONS

22.1 Audit Findings

BOYD's independent technical audit conducted in accordance with S-K 1300 concludes:

- Sufficient data have been obtained through various exploration and sampling programs and mining operations to support the geological interpretations of seam structure, thickness, and quality for the portions of the Pittsburgh Seam situated within the bounds of the PAMC. The data are of sufficient quantity and reliability to reasonably support the coal resource and coal reserve estimates in this technical report summary.
- Estimates of coal reserves reported herein are reasonably and appropriately supported by technical studies, which consider mining plans, revenue, and operating and capital cost estimates.
- The 557.6 million tons of underground coal reserves identified on the property (reported as of December 31, 2024) are economically mineable under reasonable expectations of market prices for thermal and metallurgical coal products, estimated operation costs, and capital expenditures.
- There is no other relevant data or information material to the PAMC that is necessary to make this technical report summary not misleading.

22.2 Significant Risks and Uncertainties

As a mining operation with a lengthy operating history, the purpose of CONSOL's periodic mine planning exercises is to collect and analyze sufficient data to reduce or eliminate risk in the technical components of the project and to refine economic projections based on current data. There is a high degree of certainty for this project under the current and foreseeable operating environment. A general assessment of risk is presented in the relevant sections of this report.

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23.0 RECOMMENDATIONS

Based on the lengthy history and current operating status of the PAMC, BOYD has no recommendations for additional work relevant to the subject coal reserves at this time.

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24.0 REFERENCES

There are no citations in this technical report summary. Therefore, there are no references to list.

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25.0 RELIANCE ON INFORMATION PROVIDED BY REGISTRANT

In the preparation of this report, BOYD has relied, without independent verification, upon information furnished by CONSOL with respect to: property interests; exploration results; current and historical production from such properties; current and historical costs of operation and production; and agreements relating to current and future operations and sale of production.

BOYD exercised due care in reviewing the information provided by CONSOL within the scope of our expertise and experience (which is in technical and financial mining issues) and concluded the data are valid and appropriate considering the status of the subject properties and the purpose for which this report was prepared. BOYD is not qualified to provide findings of a legal or accounting nature. We have no reason to believe that any material facts have been withheld, or that further analysis may reveal additional material information. However, the accuracy of the results and conclusions of this report are reliant on the accuracy of the information provided by CONSOL.

While we are not responsible for any material omissions in the information provided for use in this report, we do not disclaim responsibility for the disclosure of information contained herein which is within the realm of our expertise.

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CORE NATURAL RESOURCES, INC.

COMPENSATION RECOUPMENT POLICY

Core Natural Resources, Inc. (the “*Company*”) has adopted this Compensation Recoupment Policy (the “*Policy*”), effective as of January 14, 2025 (the “*Effective Date*”), which Policy supersedes and replaces any Prior Policy (as defined below) effective as of the Effective Date. Capitalized terms used in this Policy but not otherwise defined herein are defined in Section 11.

1. **Persons Subject to Policy**

This Policy shall apply to current and former Officers. Each Officer may be asked to sign an Acknowledgment Agreement acknowledging the application of this Policy to such Officer’s Incentive-Based Compensation; however, any Officer’s failure to sign any such Acknowledgment Agreement shall not negate the application of this Policy to the Officer.

2. **Compensation Subject to Policy**

This Policy shall apply to Incentive-Based Compensation received on or after October 2, 2023. For purposes of this Policy, the date on which Incentive-Based Compensation is “received” shall be determined under the Applicable Rules, which generally provide that Incentive-Based Compensation is “received” in the Company’s fiscal period during which the relevant Financial Reporting Measure is attained or satisfied, without regard to whether the grant, vesting or payment of the Incentive-Based Compensation occurs after the end of that period.

3. **Recovery of Compensation**

In the event that the Company is required to prepare a Restatement, the Company shall recover, reasonably promptly and in accordance with Section 4 below, the portion of any Incentive-Based Compensation that is Erroneously Awarded Compensation, unless the Committee has determined that recovery from the relevant current or former Officer would be Impracticable. Recovery shall be required in accordance with the preceding sentence regardless of whether the applicable Officer engaged in misconduct or otherwise caused or contributed to the requirement for the Restatement and regardless of whether or when restated financial statements are filed by the Company.

4. **Manner of Recovery; Limitation on Duplicative Recovery**

The Committee shall, in its sole discretion, determine the manner and timing of recovery of any Erroneously Awarded Compensation, which may include, without limitation, reduction or cancellation by the Company or a subsidiary of the Company of Incentive-Based Compensation or Erroneously Awarded Compensation, reimbursement or repayment by any person subject to this Policy of the Erroneously Awarded Compensation, and, to the extent permitted by law, an offset of the Erroneously Awarded Compensation against other compensation payable by the Company or a subsidiary of the Company to such person. Notwithstanding the foregoing, unless otherwise prohibited by the Applicable Rules, to the extent this Policy provides for recovery of Erroneously Awarded Compensation already recovered by the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 or Other Recovery Arrangements, the amount of Erroneously Awarded Compensation already recovered by the Company from the recipient of such Erroneously Awarded Compensation may be credited to the amount of Erroneously Awarded Compensation required to be recovered pursuant to this Policy from such person.

5. **Administration**

This Policy shall be administered, interpreted and construed by the Committee, which is authorized to make all determinations necessary, appropriate or advisable for such purpose. The Board may re-vest in itself the authority to administer, interpret and construe this Policy in accordance with applicable law, and in such event references

herein to the “Committee” shall be deemed to be references to the Board. Subject to any permitted review by the applicable national securities exchange or association pursuant to the Applicable Rules, all determinations and decisions made by the Committee pursuant to the provisions of this Policy shall be final, conclusive and binding on all persons, including the Company and its subsidiaries, stockholders and employees. The Committee may delegate administrative duties with respect to this Policy to one or more directors or employees of the Company, as permitted under applicable law, including any Applicable Rules.

6. **Interpretation**

This Policy shall be interpreted and applied in a manner that is consistent with the requirements of the Applicable Rules, and to the extent this Policy is inconsistent with such Applicable Rules, it shall be deemed amended to the minimum extent necessary to ensure compliance therewith.

7. **No Indemnification; No Liability**

The Company shall not indemnify or insure any person against the loss of any Erroneously Awarded Compensation pursuant to this Policy, nor shall the Company directly or indirectly pay or reimburse any person for any premiums for third-party insurance policies that such person may elect to purchase to fund such person’s potential obligations under this Policy. None of the Company, a subsidiary of the Company, any member of the Committee or the Board or any individual implementing this Policy shall have any liability to any person as a result of actions taken under this Policy.

8. **Application; Enforceability**

Effective as of the Effective Date, this Policy will supersede any Prior Policy in all respects. Except as otherwise determined by the Committee or the Board, the adoption of this Policy does not limit, and is intended to apply in addition to, any Other Recovery Arrangements. The remedy specified in this Policy shall not be exclusive and shall be in addition to every other right or remedy at law or in equity that may be available to the Company or a subsidiary of the Company or is otherwise required by applicable law and regulations.

9. **Severability**

The provisions in this Policy are intended to be applied to the fullest extent of the law; provided, however, to the extent that any provision of this Policy is found to be unenforceable or invalid under any applicable law, such provision will be applied to the maximum extent permitted, and shall automatically be deemed amended in a manner consistent with its objectives to the extent necessary to conform to any limitations required under applicable law.

10. **Amendment and Termination**

The Board or the Committee may amend, modify or terminate this Policy in whole or in part at any time and from time to time in its sole discretion. This Policy will terminate automatically when the Company does not have a class of securities listed on a national securities exchange or association.

11. **Definitions**

“*Applicable Rules*” means Section 10D of the Exchange Act, Rule 10D-1 promulgated thereunder, the listing rules of the national securities exchange or association on which the Company’s securities are listed, and any applicable rules, standards or other guidance adopted by the Securities and Exchange Commission or any national securities exchange or association on which the Company’s securities are listed.

“*Board*” means the Board of Directors of the Company.

“**Committee**” means the Compensation Committee of the Board or, in the absence of such a committee, a majority of the independent directors serving on the Board.

“**Erroneously Awarded Compensation**” means the amount of Incentive-Based Compensation received by a current or former Officer that exceeds the amount of Incentive-Based Compensation that would have been received by such current or former Officer based on a restated Financial Reporting Measure, as determined on a pre-tax basis in accordance with the Applicable Rules.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended.

“**Financial Reporting Measure**” means any measure determined and presented in accordance with the accounting principles used in preparing the Company’s financial statements, and any measures derived wholly or in part from such measures, including GAAP and non-GAAP financial measures, as well as stock price and total stockholder return.

“**GAAP**” means United States generally accepted accounting principles.

“**Impracticable**” means (a) the direct expense paid to third parties to assist in enforcing recovery would exceed the Erroneously Awarded Compensation; provided that the Company has (i) made reasonable attempt(s) to recover the Erroneously Awarded Compensation, (ii) documented such reasonable attempt(s) and (iii) provided such documentation to the relevant listing exchange or association, (b) the recovery would violate the Company’s home country laws adopted prior to November 28, 2022 pursuant to an opinion of home country counsel; provided that the Company has (i) obtained an opinion of home country counsel, acceptable to the relevant listing exchange or association, that recovery would result in such a violation and (ii) provided such opinion to the relevant listing exchange or association, or (c) recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. 401(a)(13) or 26 U.S.C. 411(a) and the regulations thereunder.

“**Incentive-Based Compensation**” means, with respect to a Restatement, any compensation that is granted, earned, or vested based wholly or in part upon the attainment of one or more Financial Reporting Measures and received by a person: (a) after such person began service as an Officer; (b) who served as an Officer at any time during the performance period for that compensation; (c) while the Company has a class of securities listed on a national securities exchange or association; and (d) during the applicable Three-Year Period. Incentive-Based Compensation does not include compensation that is granted, earned or vested solely upon satisfying one or more strategic or operational measures, as opposed to one or more Financial Reporting Measures, or that is awarded solely on a discretionary basis.

“**Officer**” means each person who the Company determines serves as a Company officer, as defined in Section 16 of the Exchange Act.

“**Other Recovery Arrangements**” means any clawback, recoupment, forfeiture or similar policies or provisions of the Company or its subsidiaries, including any such policies or provisions of such effect contained in any employment agreement, bonus plan, incentive plan, equity-based plan or award agreement thereunder or similar plan, program or agreement of the Company or a subsidiary or required under applicable law.

“**Prior Policy**” means the CONSOL Energy, Inc. Clawback Policy, effective as of October 2, 2023; the Amended and Restated Arch Resources, Inc. Compensation Recoupment Policy, effective as of October 2, 2023; and the Arch Resources, Inc. Compensation Recoupment Policy, dated as of February 26, 2015.

“**Restatement**” means an accounting restatement to correct the Company’s material noncompliance with any financial reporting requirement under securities laws, including restatements that correct an error in previously issued financial statements (a) that is material to the previously issued financial statements or (b) that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

“Three-Year Period” means, with respect to a Restatement, the three completed fiscal years immediately preceding the date that the Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare such Restatement, or, if earlier, the date on which a court, regulator or other legally authorized body directs the Company to prepare such Restatement. The ***“Three-Year Period”*** also includes any transition period (that results from a change in the Company’s fiscal year) within or immediately following the three completed fiscal years identified in the preceding sentence. However, a transition period between the last day of the Company’s previous fiscal year end and the first day of its new fiscal year that comprises a period of nine to 12 months shall be deemed a completed fiscal year.

**ACKNOWLEDGMENT AND CONSENT TO
COMPENSATION RECOUPMENT POLICY**

The undersigned has received a copy of the Compensation Recoupment Policy (the "Policy") adopted by Core Natural Resources, Inc. (the "Company"), and has read and understands the Policy. In addition, the undersigned acknowledges the existence of the Policy and understands that it applies to any Incentive-Based Compensation (as defined in the Policy) received on or after October 2, 2023.

Date

Signature

Name

Title