

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, 2023

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 001-38735



ALPHA METALLURGICAL RESOURCES, INC.

(Exact name of registrant as specified in its charter)

Delaware

81-3015061

(State or other jurisdiction of incorporation or organization)

(I.R.S. Employer Identification Number)

340 Martin Luther King Jr. Blvd.

Bristol, Tennessee 37620

(Address of principal executive offices, zip code)

(423) 573-0300

(Registrant's telephone number, including area code)

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

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

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

None

(Title of Class)

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 (Sec.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 ☒

Non-accelerated filer ☐

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 provided 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 its 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. ☒

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 Exchange Act) ☐ Yes ☒ No

The aggregate market value of the Common Stock held by non-affiliates of the registrant (excluding outstanding shares beneficially owned by directors, executive officers, and other affiliates) on June 30, 2023, was approximately \$1.3 billion based on the closing price of the Company’s common stock as reported that date on the New York Stock Exchange of \$164.36 per share. Such assumptions should not be deemed to be conclusive for any other purpose.

Number of shares of the registrant’s Common Stock, \$0.01 par value, outstanding as of February 19, 2024: 12,994,558

DOCUMENTS INCORPORATED BY REFERENCE

Part III incorporates certain information by reference from the registrant’s definitive proxy statement for the 2024 annual meeting of stockholders (the “Proxy Statement”), which will be filed no later than 120 days after the close of the registrant’s fiscal year ended December 31, 2023.

TABLE OF CONTENTS

Cautionary Note Regarding Forward-Looking Statements	5
Part I	
Item 1. Business	7
Item 1A. Risk Factors	30
Item 1B. Unresolved Staff Comments	52
Item 1C. Cybersecurity	52
Item 2. Properties	54
Item 3. Legal Proceedings	58
Item 4. Mine Safety Disclosures	59
Part II	
Item 5. Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities	60
Item 6. [Reserved]	60
Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations	61
Results of Operations	64
Liquidity and Capital Resources	71
Critical Accounting Policies and Estimates	75
Item 7A. Quantitative and Qualitative Disclosures about Market Risk	78
Item 8. Financial Statements and Supplementary Data	80
Report of Independent Registered Public Accounting Firm (PCAOB ID: 49)	80
Consolidated Statements of Operations for the Years Ended December 31, 2023, 2022 and 2021	82
Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2023, 2022 and 2021	83
Consolidated Balance Sheets as of December 31, 2023 and 2022	84
Consolidated Statements of Cash Flows for the Years Ended December 31, 2023, 2022 and 2021	86
Consolidated Statements of Stockholders’ Equity for the Years Ended December 31, 2023, 2022 and 2021	88
Notes to Consolidated Financial Statements	89
(1) Business and Basis of Presentation	89
(2) Summary of Significant Accounting Policies	89
(3) Revenue	95
(4) Accumulated Other Comprehensive Loss	96
(5) Net Income per Share	97
(6) Inventories, Net	98
(7) Capital Stock	98
(8) Property, Plant, and Equipment, Net	100
(9) Other Non-current Assets	100
(10) Equity Method Investments	100
(11) Leases	101
(12) Accrued Expenses and Other Current Liabilities	103
(13) Long-Term Debt	103
(14) Acquisition-Related Obligations	104
(15) Asset Retirement Obligations	105
(16) Fair Value of Financial Instruments and Fair Value Measurements	105
(17) Income Taxes	107
(18) Employee Benefit Plans	109

	(19) Stock-Based Compensation Awards	117
	(20) Related Party Transactions	123
	(21) Commitments and Contingencies	124
	(22) Concentration of Credit Risk and Major Customers	127
	(23) Segment Information	127
Item 9.	Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	131
Item 9A.	Controls and Procedures	131
Item 9B.	Other Information	131
Item 9C.	Disclosure Regarding Foreign Jurisdictions that Prevent Inspections	131
	 Part III	
Item 10.	Directors, Executive Officers and Corporate Governance	132
Item 11.	Executive Compensation	132
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters	132
Item 13.	Certain Relationships and Related Transactions, and Director Independence	132
Item 14.	Principal Accountant Fees and Services	132
	 Part IV	
Item 15.	Exhibit and Financial Statement Schedules	133
Item 16.	Form 10-K Summary	136

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This report includes statements of our expectations, intentions, plans and beliefs that constitute “forward-looking statements.” These statements, which involve risks and uncertainties, relate to analyses and other information that are based on forecasts of future results and estimates of amounts not yet determinable and may also relate to our future prospects, developments and business strategies. We have used the words “anticipate,” “believe,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “predict,” “project,” “should” and similar terms and phrases, including references to assumptions, in this report to identify forward-looking statements, but these terms and phrases are not the exclusive means of identifying such statements. These forward-looking statements are made based on expectations and beliefs concerning future events affecting us and are subject to uncertainties and factors relating to our operations and business environment, all of which are difficult to predict and many of which are beyond our control, that could cause our actual results to differ materially from those expressed in or implied by these forward-looking statements.

The following factors are among those that may cause actual results to differ materially from our forward-looking statements:

- the financial performance of the company;
- our liquidity, results of operations and financial condition;
- our ability to generate sufficient cash or obtain financing to fund our business operations;
- depressed levels or declines in coal prices;
- railroad, barge, truck, port and other transportation availability, performance and costs;
- changes in domestic or international environmental laws and regulations, and court decisions, including those directly affecting our coal mining and production and those affecting our customers’ coal usage, including potential climate change initiatives;
- steel and coke producers switching to alternative energy sources such as natural gas, renewables and coal from basins where we do not operate;
- our ability to obtain or renew surety bonds on acceptable terms or maintain our current bonding status;
- worldwide market demand for coal and steel, including demand for U.S. coal exports, and competition in coal markets;
- attracting and retaining key personnel and other employee workforce factors, such as labor relations;
- our ability to execute our share repurchase program;
- our ability to self-insure certain of our black lung obligations without a significant increase in required collateral;
- our ability to meet collateral requirements and fund employee benefit obligations;
- inflationary pressures on supplies and labor and significant or rapid increases in commodity prices;
- disruptions in delivery or changes in pricing from third-party vendors of key equipment and materials that are necessary for our operations, such as diesel fuel, steel products, explosives, tires and purchased coal;
- our ability to consummate financing or refinancing transactions, and other services, and the form and degree of these services available to us, which may be significantly limited by the lending, investment and similar policies of financial institutions and insurance companies regarding carbon energy producers and the environmental impacts of coal combustion;
- failures in performance, or non-performance, of services by third-party contractors, including contract mining and reclamation contractors;
- disruption in third-party coal supplies;
- cybersecurity attacks or failures, threats to physical security, extreme weather conditions or other natural disasters;
- the imposition or continuation of barriers to trade, such as tariffs;
- increased volatility and uncertainty regarding worldwide markets, seaborne transportation and our customers as a result of developments in and around Ukraine and the Middle East;
- changes in, renewal or acquisition of, terms of and performance of customers under coal supply arrangements and the refusal by our customers to receive coal under agreed-upon contract terms;
- reductions or increases in customer coal inventories and the timing of those changes;
- our production capabilities and costs;
- our ability to obtain, maintain or renew any necessary permits or rights;
- inherent risks of coal mining, including those that are beyond our control;
- changes in, interpretations of, or implementations of domestic or international tax or other laws and regulations, including the Inflation Reduction Act of 2022 and its related regulations;
- our relationships with, and other conditions affecting, our customers, including the inability to collect payments from our customers if their creditworthiness declines;
- our indebtedness as we may incur it from time to time;
- reclamation and mine closure obligations; and
- our assumptions concerning economically recoverable coal reserve estimates.

The list of factors identified above is not exhaustive. We caution readers not to place undue reliance on any forward looking statements, which are based on information currently available to us and speak only as of the dates on which they are made. When considering these forward-looking statements, you should keep in mind the cautionary statements in this report. We do not undertake any responsibility to publicly revise these forward-looking statements to take into account events or circumstances that occur after the date of this report. Additionally, except as expressly required by federal securities laws, we do not undertake any responsibility to update you on the occurrence of any unanticipated events, which may cause actual results to differ from those expressed or implied by the forward-looking statements contained in this report.

Part I

Item 1. *Business*

Unless otherwise indicated or the context otherwise requires, references in this “Item 1. Business” section to “the combined company,” “we,” “us” and other similar terms refer to Alpha Metallurgical Resources, Inc. and its consolidated subsidiaries (previously Contura Energy, Inc. and its consolidated subsidiaries). Disclosures in this “Item 1. Business” section should be read in conjunction with “Item 1A. Risk Factors” for further discussion of factors impacting our business. Effective February 1, 2021, we changed our corporate name from Contura Energy, Inc. to Alpha Metallurgical Resources, Inc. to more accurately reflect our strategic focus on the production of metallurgical coal. Following the effectiveness of our name change, our ticker symbol on the New York Stock Exchange changed from “CTRA” to “AMR” effective on February 4, 2021.

Our Company

We are a Tennessee-based mining company with operations in Virginia and West Virginia. With customers across the globe, high-quality reserves and significant port capacity, we reliably supply metallurgical coal products to the steel industry. We operate highly productive, cost-competitive coal mines across the CAPP coal basin. Our portfolio of mining operations consists of 15 underground mines, seven surface mines and nine coal preparation plants. We own a 65.0% interest in Dominion Terminal Associates (“DTA”), a coal export terminal in Newport News, Virginia. DTA provides us with the ability to fulfill a broad range of customer coal quality requirements through coal blending, while also providing storage capacity and transportation flexibility.

We predominantly produce metallurgical (“met”) coal, which is shipped to domestic and international steel and coke producers. Although our strategic focus is on the production of met coal, we also produce thermal coal as byproduct and it is primarily sold to large utilities and industrial customers both in the United States and across the world. Refer to Notes 22 and 23 to the Consolidated Financial Statements for geographical information about our coal sales and additional segment information.

We have a substantial reserve base of 316.0 million tons of proven and probable reserves as of December 31, 2023. Our reserve base consists of 303.0 million tons of proven and probable metallurgical reserves, and 12.9 million tons of proven and probable thermal reserves.

Through our operations across the CAPP coal basin in Virginia and West Virginia, we are able to source coal from multiple mines to meet the needs of a long-standing global customer base, many of which have been served by us or our predecessors for decades. We are continuously evaluating opportunities to strategically cultivate current relationships to drive new business in our target growth markets. In addition, our experienced management team regularly analyzes potential acquisitions, joint ventures and other opportunities that would be accretive and synergistic to our existing asset portfolio.

Other Business Developments

During 2023, development was completed and production began at our Rolling Thunder and Checkmate Powellton mines within our Power Mountain and Elk Run mining complexes, respectively, which produce High-Vol. B quality met coal from the Powellton coal seam.

In August 2023, we completed our transition to a pure-play metallurgical producer with the closure of Slabcamp, which was our last remaining thermal mine.

Our History

We were formed in 2016 to acquire and operate certain of Alpha Natural Resources, Inc.’s former core coal operations, as part of the Alpha Natural Resources, Inc. Plan of Reorganization. We entered into various settlement agreements with the Debtors, their bankruptcy successor, and third parties as part of the Debtors’ bankruptcy reorganization process. We assumed acquisition-related obligations through those settlement agreements, which became effective on July 26, 2016, the effective date of the Debtors’ Plan of Reorganization. As of December 31, 2023, we did not have any remaining acquisition-related obligations. Refer to Note 14 to the Consolidated Financial Statements for further information on our acquisition-related obligations.

On December 8, 2017, we closed a transaction with Blackjewel to sell our Western Mines located in the PRB, Wyoming, along with related coal reserves, equipment, infrastructure and other real properties. On October 4, 2019, we closed on the ESM Transaction in connection with Blackjewel’s subsequent bankruptcy filing. On May 29, 2020, certain of our subsidiaries

(Contura Coal West, LLC and Contura Wyoming Land, LLC), one of which held the mining permits for the Western Mines, were merged with certain subsidiaries of ESM to become wholly-owned subsidiaries of ESM and to complete the permit transfer process in connection with the ESM Transaction.

On November 9, 2018, we merged with Alpha Natural Resources Holdings, Inc. and ANR, Inc. Upon the consummation of the transactions contemplated by a definitive merger agreement (the “Merger Agreement”), our common stock began trading on the New York Stock Exchange under the ticker “CTRA.” Previously, our shares traded on the OTC market under the ticker “CNTE.”

On December 10, 2020, we closed on a transaction with Iron Senergy Holdings, LLC, to sell our thermal coal mining operations located in Pennsylvania consisting primarily of our Cumberland mining complex and related property (our former NAPP operations). This transaction accelerated our strategic exit from thermal coal production to shift our focus to met coal production.

Effective February 1, 2021, we changed our corporate name from Contura Energy, Inc. to Alpha Metallurgical Resources, Inc. to more accurately reflect our strategic focus on the production of met coal. Following the effectiveness of our name change, our ticker symbol on the New York Stock Exchange changed from “CTRA” to “AMR” effective on February 4, 2021.

Our Mining Operations and Properties

The following table provides a summary of information regarding our active mining complexes as of December 31, 2023 (see also “Item 2. Properties” for further information):

(Amounts in thousands, except for mine data)

Mining Complex	Location	Acquired	Mines ⁽¹⁾	Equipment ⁽²⁾	Rail ⁽³⁾	Tons Sold ⁽⁴⁾			Carrying Value ⁽⁵⁾	Reserves ⁽⁶⁾
						2023	2022	2021		
Aracoma	WV	2018	3	CM	CSX	2,607	2,643	2,221	\$ 174,652	41,276
Kepler	WV	2018	1	CM	CSX/NS	1,958	1,897	1,571	\$ 235,203	41,190
Kingston	WV	2018	4	CM/S/H	CSX	2,254	1,935	2,348	\$ 34,208	38,657
Marfork	WV	2018	6	CM/S/H	CSX	4,345	4,106	4,032	\$ 322,733	97,653
McClure/ Toms Creek	VA	2016	5	CM/S/H	CSX/NS	4,071	3,703	4,033	\$ 114,530	68,747
Power Mountain	WV	2016	2	CM	NS	718	832	837	\$ 70,594	—
Elk Run	WV	2018	1	CM	CSX	—	—	—	\$ 35,535	28,434

⁽¹⁾ Number of active mines as of December 31, 2023.

⁽²⁾ Equipment: S = Shovel/Excavator/Loader/Trucks; CM = Continuous Miner; H = Highwall Miner

⁽³⁾ CSX = CSX Transportation; NS = Norfolk Southern Railway Company

⁽⁴⁾ Tons of coal purchased from third parties and not processed are not included.

⁽⁵⁾ Net book value of property, plant and equipment and owned and leased mineral rights as of December 31, 2023.

⁽⁶⁾ Proven and probable reserves as of December 31, 2023. Refer to Item 2. Properties for further information. Feasibility/Pre-feasibility study not considered cost beneficial for Power Mountain complex.

Aracoma – Aracoma is a mining complex located in Logan, Mingo, and Boone counties, West Virginia. The complex has three active underground mines which produce primarily High-Vol. B quality met coal from the Upper Chilton, Upper Cedar Grove, and No. 2 Gas coal seams. Mine lives range from 5 to 16 years. Coal is processed at the Bandmill Preparation Plant and loaded onto CSX rail for delivery to customers.

Kepler – Kepler is a mining complex located in Wyoming, McDowell, and Raleigh counties, West Virginia. The complex has one active underground mine (with an estimated life of 15 years) which produces primarily Low-Vol. quality met coal from the Pocahontas No. 3 coal seam. Coal is processed at the Kepler Preparation Plant and either loaded onto NS rail or trucked to the Feats Loadout and loaded onto the CSX rail for delivery to customers.

Kingston – Kingston is a mining complex located in Fayette and Raleigh counties, West Virginia. The complex has one active underground mine, which produces primarily Mid-Vol. quality met coal from the Douglas coal seam. The complex also has three active surface mines which produced High-Vol. A quality met coal as well as some thermal quality coal as a by-product of mining from multiple coal seams. Mine lives range from 2 to 11 years. Coal from the underground mine is processed at the Kingston Preparation Plant and trucked to the Pax Loadout to be loaded onto CSX rail for delivery to customers. Coal from the

surface mines may be processed through the Kingston Preparation Plant, trucked to and processed through the Mammoth Plant, or trucked directly to the Pax Loadout or Marmet Dock for delivery to customers.

Marfork – Marfork is a mining complex located in Raleigh, Boone, Kanawha, and Fayette counties, West Virginia. The complex has three active underground mines which produce High-Vol. A quality met coal from the Eagle coal seam and one active underground mine that produces mid-vol quality met coal from the Glen Alum Tunnel seam. The complex also has two active surface mines which produce High-Vol. A quality met coal as well as some thermal quality coal as a by-product of mining from multiple coal seams. Mine lives range from 2 to 17 years. Coal from the underground mines is processed at the Marfork Preparation Plant and loaded onto the CSX rail for delivery to customers. Coal from the surface mines may be processed through the Marfork Preparation Plant or trucked directly to the Pax Loadout or the Marmet Dock for delivery to customers.

McClure/Toms Creek – McClure/Toms Creek is a mining complex located in Dickenson, Buchanan, Russell, and Wise counties, Virginia. The complex has three active underground mines which produce High-Vol. A and Mid-Vol. quality met coal from the Upper Banner, Lower Banner, and Jawbone coal seams. The complex also has two active surface mines which produce primarily High-Vol. A quality met coal as well as some thermal quality coal as a by-product of mining from multiple coal seams. Mine lives range from 2 to 27 years. Coal is processed at either the McClure Preparation Plant or the Toms Creek Preparation Plant and loaded on the CSX or NS rail, respectively for delivery to customers.

Power Mountain – Power Mountain is a mining complex located in Nicholas County, West Virginia. The complex has one active underground mine (with an estimated life of 3 years) which produces High-Vol. B quality met coal from the Eagle coal seam. Coal is processed at the Power Mountain Preparation Plant and loaded onto NS rail for delivery to customers. In addition, during 2023 development was completed and production began at a second underground mine (with an estimated life of 15 years) which produces High-Vol. B quality met coal from the Powellton coal seam. Coal from the mine is currently trucked to and processed through the Mammoth Preparation Plant. Following the expected development of a haul road in 2024, coal is expected to be trucked to and processed through the Power Mountain Preparation Plant.

Elk Run – Elk Run is a mining complex located in Boone County, West Virginia. During 2023, development was completed and production began at an underground mine (with an estimated life of 22 years) which produces High-Vol. B quality met coal from the Powellton coal seam. Coal from the mine is processed at the Chess Processing Plant and loaded onto CSX rail for delivery to customers.

Equipment

Our plant and equipment, including underground and surface equipment, are of varying age, in good operational condition, and are regularly maintained and serviced by a dedicated maintenance workforce and third-party suppliers, including scheduled preventive maintenance.

Preparation Plants, Loadouts, and Docks

The following is a summary of information regarding our active preparation plants as of December 31, 2023:

Preparation Plant	Year Constructed/ Upgraded	Processing Capacity (Tons per hour)	Utilization %	Power Source
Bandmill	2010	1,200	66%	American Electric Power
Kepler	1967	900	54%	American Electric Power
Kingston	1974/2001	700	73%	American Electric Power
Marfork	1994/2019	2,400	70%	American Electric Power
McClure	1979/2019	1,100	53%	American Electric Power
Toms Creek	1980/2004	1,100	43%	American Electric Power
Power Mountain	1985/2010	1,200	26%	American Electric Power
Chess Processing ⁽¹⁾	1980/1998	2,200	N/A	American Electric Power
Mammoth	1950/2008	1,200	18%	American Electric Power

⁽¹⁾ Plant refurbished in 2023. Produced tons received during the fourth quarter of 2023 but not processed until the first quarter of 2024.

The following is a summary of information regarding our active loadouts and docks as of December 31, 2023:

Loadout/Dock	Year Constructed	Loading Capacity (Tons per hour)
Pax Loadout	2006	3,500
Feats Loadout	1975	3,500
Marmet Dock	1986	1,600

Export Terminal

The following is a summary of information regarding DTA (in which we own a 65% interest) as of December 31, 2023:

Export Terminal	Year Constructed	Loading Capacity (Tons per hour)	Storage Capacity (Net tons)
DTA	1984	Up to 6,500	1.7 million

Coal Mining Techniques

We use four different mining techniques to extract coal from the ground: room-and-pillar mining, truck-and-shovel mining and truck and front-end loader mining, contour mining, and highwall mining. We do not use mountaintop removal mining and currently have no plans to do so in the future.

Room-and-Pillar Mining

Certain of our mines in CAPP use room-and-pillar mining methods. In this type of mining, main airways and transportation entries are developed and maintained while remote-controlled continuous miners extract coal from the seam, leaving pillars to support the roof. Shuttle cars or battery coal haulers are used to transport coal from the continuous miner to the conveyor belt for transport to the surface. This method is more flexible than longwall mining and often used to mine smaller coal blocks or thinner seams of coal. Ultimate seam recovery of in-place reserves is less than that achieved with longwall mining. All of this production is also processed in preparation plants to remove rock and impurities before it becomes saleable clean coal.

Truck-and-Shovel Mining and Truck and Front-End Loader Mining

We utilize truck/shovel and truck/front-end loader mining methods at some of our CAPP surface mines. These methods are similar and involve using large, electric or hydraulic-powered shovels or diesel-powered front-end loaders to remove earth and rock (overburden) covering a coal seam which is later used to refill the excavated coal pits after the coal is removed. The loading equipment places the coal into trucks for transportation to a preparation plant or loadout area. Ultimate seam recovery of in-place reserves on average exceeds 90%. Depending on geology and market destination, surface-mined coal may need to be processed in a preparation plant before sale. In the case of some metallurgical grade coals, as much as 80% of surface mined coal may need to be processed in a preparation plant to enhance the sales value of the coal. Productivity depends on overburden and coal thickness (strip ratio), equipment utilized and geologic factors.

Contour Mining

We use contour mining at certain of our CAPP surface mines, which limits the overburden removal from above a coal seam or series of coal seams. In contour mining, surface mining machinery follows the contours of a coal seam or seams around a ridge, excavating the overburden and recovering the coal seam or seams as a “contour bench” around the ridge is created. This contour bench is then backfilled and graded in accordance with an approved reclamation plan. Highwall mining methods are used in connection with some contour mining operations. Depending on geology and market destination, coal mined by contour mining may need to be processed in preparation plants to remove rock and impurities before it becomes a saleable clean coal.

Highwall Mining

We utilize highwall mining methods at certain of our CAPP surface mines. A highwall mining system consists of a remotely controlled continuous miner, which extracts coal and conveys it via augers or belt conveyors to the surface. The cut is typically a rectangular, horizontal opening in the highwall (the unexcavated face of exposed overburden and coal in a surface mine) 9-foot or 11-foot wide and reaching depths of up to 1,000 feet. Multiple parallel openings are driven into the highwall, separated by narrow pillars that extend the full depth of the hole. All of the coal mined at our highwall mining operations is processed in preparation plants to remove rock and impurities before it becomes saleable clean coal.

Financial Information About Reportable Segments and Geographic Areas

Refer to “Item 7. Management’s Discussion and Analysis of Financial Condition—Results of Operations” and Notes 22 and 23 to the Consolidated Financial Statements for financial information about our reportable segment and geographic areas.

Marketing, Sales and Customer Contracts

We market coal produced at our operations and purchase and resell coal mined by others. We have coal supply commitments with a wide range of steel and coke manufacturers, industrial customers, and electric utilities. Our marketing efforts are centered on meeting customer needs and requirements. By offering coal of various grades, we are able to provide the specific qualities relevant to our customers and to serve a global customer base. Through this global platform, our coals are shipped to customers on five continents. Our broad customer and product base allows us to adjust to changing market conditions. Many of our larger customers are well-established steel manufacturers and public utilities.

Our coal volumes include coal produced and processed by us, our “captive coal,” as well as coal purchased from third-party producers to blend with our produced coal in order to meet customer specifications. These volumes are processed by us, meaning that we washed, crushed or blended the coal at one of our preparation plants or loading facilities prior to resale. Our coal volumes within our Met segment operations also include met coal volumes purchased from domestic third-party producers and sold into international markets.

Our export shipments serviced customers in 25 and 26 countries during the years ended December 31, 2023 and 2022, respectively. Asia was our largest export market for the years ended December 31, 2023 and 2022, with coal sales to Asia accounting for approximately 46% and 53%, respectively of export coal revenues and 34% and 43%, respectively, of coal revenues. All of our sales are conducted in U.S. dollars. Refer to Note 22 to the Consolidated Financial Statements for additional export coal revenue information.

Met coal accounted for approximately 95% of our coal revenues for each of the years ended December 31, 2023 and 2022. Our met coal sales are typically made with customers with whom we have a long-term relationship. Domestic met customers typically enter into one-year agreements with a fixed price for the entire contract year. Any longer-term agreement would generally have a renegotiation of price each subsequent contract year. Export sales are generally made on an annual, quarterly, or spot cargo basis. Annual and quarterly agreements typically have market-indexed pricing that changes with the market monthly. Any export agreement with a term greater than one year would generally have a renegotiation of pricing terms for each subsequent contract year. Volume for future years is generally contingent on both parties agreeing to a pricing mechanism to cover the contract year.

Thermal coal accounted for approximately 5% of our coal revenues for each of the years ended December 31, 2023 and 2022. We sometimes enter into long-term contracts with our thermal coal customers. Terms of these agreements may address coal quality requirements, quantity parameters, flexibility and adjustment mechanisms, permitted sources of supply, treatment of environmental constraints, options to extend, force majeure, suspension, termination and assignment issues, the allocation between the parties of the cost of complying with future governmental regulations and many other matters.

Generally, our long-term thermal coal agreements contain committed volumes and fixed prices for a period or a certain number of periods pursuant to which thermal coal will be delivered under these agreements. After a fixed price period elapses, the long-term agreement may provide for a price negotiation/determination period prior to the commencement of the pending unpriced contract period. The price negotiations generally consider either then current market prices and/or relevant market indices. Provisions of this sort increase the difficulty of predicting the exact prices a coal supplier will receive for its coal during the course of the long-term agreement. During the years ended December 31, 2023 and 2022, approximately 21% and 54%, respectively, of our thermal coal sales volume were delivered pursuant to long-term contracts.

Distribution and Transportation

Coal consumed domestically is usually sold at the mine and transportation costs are normally borne by the purchaser. Export coal is usually sold at the loading port, with purchasers responsible for further transportation.

For our export sales, we negotiate transportation agreements with various providers, including railroads, trucks, barge lines, and terminal facilities to transport shipments to the relevant loading port. We coordinate with customers, mining facilities and transportation providers to establish shipping schedules that meet each customer’s needs. Our captive coal is loaded from our preparation plants, loadout facilities, and in certain cases directly from our mines. The coal we purchase is loaded in some cases directly from mines and preparation plants operated by third parties or from an export terminal. Virtually all of our coal is transported from the mine to our preparation plants by truck or belt conveyor systems. It is transported from preparation plants

and loading facilities to the customer by means of railroads, trucks, barge lines, and lake-going and ocean-going vessels from terminal facilities. We depend upon rail, barge, trucking and other systems to deliver coal to markets. In the years ended December 31, 2023 and 2022, our produced coal was transported from the mines and to the customer primarily by rail, with the main rail carriers being CSX Transportation and Norfolk Southern Railway Company. Rail shipments constituted approximately 89% and 84% of total shipments of coal volume from our mines during the years ended December 31, 2023 and 2022, respectively. The balance was shipped from our preparation plants, loadout facilities or mines via truck or barge. Our export sales are primarily shipped to DTA and Pier 6 (Lambert's Point) shipping ports in the Hampton Roads area of Virginia. We may ship limited export quantities through other U.S. ports when warranted by logistics and economics.

Procurement

Principal goods and services used in our business include mining equipment, replacement parts and materials such as explosives, diesel fuel, tires, conveyance structure, ventilation supplies, lubricants, steel, magnetite and other raw materials, maintenance and repair services, electricity, and roof control and support items. We rely substantially on third-party suppliers to provide mining materials and equipment. Although there continues to be consolidation, which has resulted in a limited number of suppliers for certain types of equipment and supplies, we believe that adequate substitute suppliers are available.

In the first quarter of 2023, we completed a series of transactions to acquire a number of coal trucks and related equipment and facilities to secure trucking services for our operations. In December 2022, we purchased substantially all of the assets of a mining equipment component manufacturing and rebuild business to help secure the supply of certain underground mining equipment parts needed for our operations.

We incur substantial expenses each year to procure goods and services in support of our respective business activities in addition to capital expenditures. We use suppliers for a significant portion of our equipment rebuilds and repairs, as well as construction and reclamation activities.

We have a centralized sourcing group, which sets sourcing policy and strategy focusing primarily on major supplier contract negotiation and administration, including but not limited to the purchase of major capital goods in support of the mining operations. We promote competition between suppliers and seek to develop relationships with suppliers that focus on lowering our costs while improving quality and service. We seek suppliers who identify and concentrate on implementing continuous improvement opportunities within their area of expertise.

Competition

The coal industry is highly competitive, both in the U.S. and internationally. In the met coal market, of the approximately 72.4 million tons produced in the U.S. in 2023, we produced approximately 14.8 million tons, or 20%. A significant portion of U.S. met coal production is shipped internationally, where it competes directly with international sources of production. Approximately 71% of our met coal tons sold were shipped internationally in 2023.

In the thermal market, of the approximately 502.0 million tons produced in the U.S. in 2023, we produced approximately 1.9 million tons, or less than 1%. Only a small portion of overall U.S. thermal production is shipped internationally, but there is strong competition in the domestic market. Approximately 66% of our thermal coal tons sold were shipped internationally in 2023. We compete for U.S. sales with numerous coal producers in the Appalachian region and the Illinois basin, and in some cases with western coal producers.

Demand for met coal and the prices that we are able to obtain for it depend to a large extent on the demand and price for steel in the U.S. and internationally. This demand is influenced by factors beyond our control, including overall economic activity and the availability and relative cost of substitute materials. In the export met coal market, we compete with producers from Australia and Canada and with other international producers on many of the same factors as in the U.S. market. Competition in the export market is also affected by fluctuations in relative foreign exchange rates and costs of inland and ocean transportation, among other factors.

Demand for thermal coal and the prices that we are able to obtain for it are closely linked to coal consumption patterns of the domestic electric generation industry. These coal consumption patterns are influenced by many factors beyond our control, including the demand for electricity, which is significantly dependent upon summer and winter temperatures, and commercial and industrial outputs in the U.S., environmental and other government regulations, technological developments and the location, availability, quality and price of competing sources of power. These competing sources include natural gas, nuclear, fuel oil and increasingly, renewable sources such as solar and wind power. Demand for thermal coal and the prices that we are able to obtain for it are affected by each of the above factors.

Human Capital Resources

As of December 31, 2023, we had approximately 4,160 employees, all of which were full-time employees, with 74% of our total workforce being hourly workers. Our employees were almost entirely located in the United States, with three employees located outside the United States. Approximately 97% of our total workforce was union-free as of December 31, 2023. Certain of our subsidiaries have wage agreements with the UMWA representing roughly 3% of our workforce. Certain of our subsidiaries have wage agreements with the UMWA that are subject to termination by either the employer or the UMWA, without cause, on July 31, 2025 and one on February 28, 2026. We strive to maintain positive working relationships with organized labor. Relations with our employees are important to our success, and we believe that we have good relations with our workforce.

As of December 31, 2023, we had approximately 3,900 employees working at our mining operations across Central Appalachia in Virginia and West Virginia, while the remainder of our personnel were employed at our headquarters in Bristol, Tennessee, in Julian, West Virginia, or at other administrative offices throughout the region. As of December 31, 2023, approximately 37% of our total workforce had at least ten years of service with our Company, while approximately 25% had fifteen or more years of service with our Company.

Employee Compensation and Benefits

We require a skilled workforce with mining experience and proficiency as well as qualified managers and supervisors to run our business. In addition, we depend on the experience and industry knowledge of our officers and other key employees to design and execute our business plans. We, along with the mining industry generally, face a shortage of skilled and experienced employees. Therefore, we offer employees competitive compensation and benefits to attract and retain a skilled and qualified workforce. We offer our employees competitive fixed base pay; a bonus incentive program for administrative positions tied to company safety, environmental stewardship, and financial performance; an operations bonus incentive program tied to site-specific safety, environmental stewardship and production goals; retention programs; paid time-off including holidays; a comprehensive benefits package that includes medical, dental, and vision coverage; disability and life insurance coverages; and a 401(k) retirement savings program with an employer match. All employees have access to our Employee Assistance Program (“EAP”) at no cost, which gives them and their family access to licensed professionals for help with mental health, stress, addiction, grievances, relationship issues, childcare and eldercare services, legal and personal finance services and other work/life balance matters. To help retain key employees in certain positions, our long-term incentive program awards cash or equity grants with time-based and performance-based vesting conditions. Certain key employees are also eligible to participate in our non-qualified deferred compensation plan.

Employee Training and Development

At Alpha, we strive to maintain a positive culture where employees can contribute their best work, take pride in doing the right thing, and work to improve and strengthen the organization. To have a successful operation, we endeavor to establish and maintain relationships with and among our employees that are built upon mutual respect, trust, and appreciation.

Due to the industry shortage of skilled and experienced employees, we have an extensive in-house apprentice miner training program. Selected participants are given robust safety and mining training over a six-month period in order to obtain their required miner’s certification. We frequently provide training opportunities for operations employees to obtain certifications for Emergency Medical Technician (“EMT”), Mechanical Engineering Technology (“MET”), foreman and supervisory certifications, and electrical certifications in addition to providing apprentice miner training and supervisor training programs.

In addition to various training programs that we require employees in certain skilled positions to complete, all of our employees are provided with employee handbooks and are expected to follow policies and procedures concerning employment matters at Alpha and our affiliates including, but not limited to: anti-harassment, workplace violence, code of business ethics, drug and alcohol policies, safety policies and vehicle policies.

Employee Safety, Health, and Welfare

Safety is one of our core values and is the foundation for how we manage every aspect of our business. Our employees are empowered with the skills, training, resources, and responsibility to perform their jobs in a safe manner and are accountable for their own safety as well as the safety of their co-workers. Every employee has a voice in the safety process at each of our mines

and other operating sites. Our behavior-based safety process empowers employees to engage in the elimination of at-risk behaviors in the workplace and in incident prevention and continuous improvement. In recognition of the interdependence between safety and operations, our “Safe Production” process promotes the effective utilization of procedures, developing safety action plans at each operating group and sharing of best practices, safety alerts and lessons learned across the entire organization.

Safety leadership and training programs are based upon the concepts of situational awareness and observation, changing behaviors and, most importantly, employee involvement. The core elements of our safety training include identification of critical behaviors and the frequency of those behaviors, employee feedback, and removal of barriers for continuous improvement. All employees are empowered to champion the safety process and are challenged to identify hazards and initiate prompt corrective actions. All levels of the organization are expected to be proactive and commit to continuous improvement and implementation of new safety processes that promote a safe and healthy work environment.

In 2023, we achieved an overall Non-fatal days lost (“NFDL”) safety incident rate that was 41% better than the U.S. industry average NFDL safety incident rate per 200,000 hours worked. The industry rate is based on available data for the first three quarters of 2023 and the Alpha rate reflects full year 2023.

Alpha’s mine operations routinely collaborate with academic institutions as well as federal and state agencies to facilitate testing of new concepts and technologies and to utilize them whenever possible to provide the best safety and protection for our employees.

We also believe in taking precautions to avoid incidents and prevent them from occurring. Our Incident Response Plan and Mine Emergency Response Drills have been developed and widely disseminated to appropriate operations and corporate personnel to build the framework for a prompt and coordinated response in the event an incident occurs. Alpha’s award winning mine rescue teams undergo highly specialized training and compete in regional and national mine rescue events to test their skills in first aid, firefighting, mine ventilation, and critical decision-making.

As posted on our Company website, several of our mine operations have been recognized on numerous occasions for outstanding performance and have received several awards in the areas of safety and mine rescue. In 2023, Alpha mine rescue teams won two overall grand champion awards along with several other first-place awards in both overall competition honors and technical category titles.

Refer to Exhibit 95 Mine Safety Disclosure included in this Annual Report on Form 10-K for additional mine safety information.

Legal Proceedings

We could become party to legal proceedings from time to time. These proceedings, as well as governmental examinations, could involve various business units and a variety of claims, including, but not limited to, contract disputes, personal injury claims, property damage claims (including those resulting from blasting, subsidence, trucking and flooding), environmental and safety issues, and employment matters. While some legal matters may specify the damages claimed by the plaintiffs, many seek an unquantified amount of damages. Even when the amount of damages claimed against us or our subsidiaries is stated, (i) the claimed amount may be exaggerated or unsupported; (ii) the claim may be based on a novel legal theory or involve a large number of parties; (iii) there may be uncertainty as to the likelihood of a class being certified or the ultimate size of the class; (iv) there may be uncertainty as to the outcome of pending appeals or motions; and/or (v) there may be significant factual issues to be resolved. As a result, if such legal matters arise in the future, we may be unable to estimate a range of possible loss for matters that have not yet progressed sufficiently through discovery and development of important factual information and legal issues. We record accruals based on an estimate of the ultimate outcome of these matters, but these estimates can be difficult to determine and involve significant judgment. For additional information about the Company’s legal proceedings, refer to Note 21, part (d), to the Consolidated Financial Statements, which is incorporated herein by reference.

ENVIRONMENTAL AND OTHER REGULATORY MATTERS

Federal, state and local authorities regulate the U.S. coal mining industry and the industries it serves with respect to matters such as employee health and safety, permitting and licensing requirements, air quality standards, water quality, plant and wildlife protection, the reclamation of mining properties after mining has been completed, the discharge of materials into the environment, surface subsidence from underground mining, and the effects of mining on groundwater quality and availability. These laws and regulations, which are extensive, subject to change, and have tended to become stricter over time, have had, and will continue to have, a significant effect on our production costs and our competitive position relative to certain other sources of electricity generation. Future legislation, regulations or orders, as well as future interpretations and more rigorous enforcement of existing laws, regulations or orders, may require substantial increases in equipment and operating costs to us and delays, interruptions, or a termination of operations, the likelihood or extent of which we cannot predict. In particular, the U.S. Securities and Exchange Commission (“SEC”) continues to work to finalize regulations it proposed in March 2022 intended to standardize climate-related disclosures. We intend to continue to comply with regulatory requirements as they evolve by timely implementing necessary modifications to facilities or operating procedures. Future legislation, regulations, orders or regional or international arrangements, agreements or treaties, as well as efforts by private organizations, including those relating to global climate change, may continue to cause coal to become more heavily regulated.

We endeavor to conduct our mining operations in compliance with all applicable federal, state, and local laws and regulations. We have certain procedures in place that are designed to enable us to comply with these laws and regulations. However, due to the complexity and interpretation of these laws and regulations, we cannot guarantee that we have been or will be at all times in complete compliance, and violations are likely to occur from time to time. None of the violations or the monetary penalties assessed upon us have been material. Future liability under or compliance with environmental and safety requirements could, however, have a material adverse effect on our operations or competitive position. Under some circumstances, substantial fines and penalties, including revocation, denial or suspension of mining permits, may be imposed under the laws described below.

Monetary sanctions, expensive compliance measures and, in severe circumstances, criminal sanctions may be imposed for failure to comply with these laws.

As of December 31, 2023, we had accrued \$205.4 million for reclamation liabilities and mine closures, including \$38.9 million of current liabilities.

Mining Permits and Approvals

Numerous governmental permits or approvals are required for mining operations pursuant to certain federal, state and local laws applicable to our operations. When we apply for these permits and approvals, we may be required to prepare and present data to federal, state or local authorities pertaining to the effect or impact that any proposed production or processing of coal may have upon the environment and measures we will take to minimize and mitigate those impacts. The requirements imposed by any of these authorities may be costly and time consuming and may delay commencement or continuation of mining operations.

In order to obtain mining permits and approvals from federal and state regulatory authorities, mine operators, including us, must submit a reclamation plan for restoring, upon the completion of mining operations, the mined property to its prior or better condition, productive use or other permitted condition. Typically, we submit the necessary permit applications several months, or even years, before we plan to begin mining a new area. Mining permits generally are approved months or even years after a completed application is submitted. Therefore, we cannot be assured that we will obtain future mining permits in a timely manner.

Permitting requirements also require, under certain circumstances, that we obtain surface owner consent if the surface estate has been severed from the mineral estate. This requires us to negotiate with third parties for surface rights that overlie coal we control or intend to control. These negotiations can be costly and time-consuming, lasting years in some instances, which can create additional delays in the permitting process. If we cannot successfully negotiate for surface rights, we could be denied a permit to mine coal we already control.

On October 4, 2019, the WV Bankruptcy Court entered an order approving the sale by Blackjewel of the Western Assets to ESM. The ESM Transaction occurred on October 18, 2019. We were the former owner of the Western Assets, having sold them to Blackjewel in December 2017 (the “2017 Blackjewel Sale”). As the mine permit transfer process relating to our sale of the Western Assets to Blackjewel had not been completed prior to Blackjewel’s and certain of its affiliates’ filing petitions for relief under chapter 11 of title 11 of the U.S. Code (the “Bankruptcy Code”), we remained the permitholder in good standing for both

mines. In connection with ESM's acquisition of the Western Assets from Blackjewel, on October 18, 2019, we and ESM finalized an agreement that provided, among other items, for the eventual transfer of the Western Asset permits from us to ESM and replacement by ESM of our surety bonds associated with these properties. In furtherance of certain objectives contemplated under that agreement, we and ESM agreed to the merger of two of our now-former subsidiaries, *i.e.*, Contura Coal West, LLC ("CCW"), which held and still holds the Western Asset permits, and Contura Wyoming Land, LLC ("CWL"), with certain entities formed by ESM for purposes of acquiring CCW and CWL. The ESM entities involved in the mergers were ESM Coal West SPV, LLC ("First Merging Entity") and ESM Wyoming Land SPV, LLC ("Second Merging Entity"). The mergers were consummated effective May 29, 2020, with the First Merging Entity merging with and into CCW, with CCW as the surviving entity (the "First Surviving Entity"), and the Second Merging Entity merging with and into CWL, with CWL as the surviving entity (the "Second Surviving Entity"). Upon the mergers becoming effective, each of the First Surviving Entity and the Second Surviving Entity became wholly-owned subsidiaries of ESM. As such, the Western Asset permits are still held by the same entity, Contura Coal West, LLC, but said entity is no longer a subsidiary of ours, and we no longer have surety bonds associated with these permits and properties.

Surface Mining Control and Reclamation Act

SMCRA, which is administered by the Office of Surface Mining Reclamation and Enforcement ("OSM"), establishes mining, environmental protection, reclamation, and closure standards for all aspects of surface mining as well as many aspects of underground mining that effect surface expressions. Mine operators must obtain SMCRA permits and permit renewals from the OSM or from the applicable state agency if the state agency has obtained primary control of administration and enforcement of the SMCRA program, or primacy. A state agency may obtain primacy if OSM concludes that the state regulatory agency's mining regulatory program is no less stringent than the federal mining program under SMCRA. States where we have active mining operations have achieved primacy and issue permits in lieu of OSM. OSM maintains oversight of how the states administer their programs.

SMCRA permit provisions include a complex set of requirements which include: coal prospecting; mine plan development; topsoil or growth medium removal, storage and replacement; selective handling of overburden materials; mine pit backfilling and grading; protection of the hydrologic balance, including outside the permit area; subsidence control for underground mines; surface drainage control; mine drainage and mine discharge control and treatment; and re-vegetation and reclamation.

The mining permit application process is initiated by collecting baseline data to adequately characterize the pre-mine environmental condition of the permit area. This work includes, but is not limited to, surveys of cultural and historical resources, soils, vegetation, wildlife, assessment of surface and ground water hydrology, climatology, and wetlands. In conducting this work, we collect geologic data to define and model the soil and rock structures associated with the coal that we will mine. We develop mining and reclamation plans by utilizing this geologic data and incorporating elements of the environmental data. The mining and reclamation plan incorporates the provisions of SMCRA, the state programs, and the complementary environmental programs that affect coal mining. Also included in the permit application are documents defining ownership and agreements pertaining to coal, minerals, oil and gas, water rights, rights of way and surface land, and documents required of the OSM's Applicant Violator System ("AVS"), including the mining and compliance history of officers, directors and principal owners of the entity.

Regulations under SMCRA and its state analogues provide that a mining permit or modification can, under certain circumstances, be delayed, refused or revoked if we or any entity that owns or controls us or is under common ownership or control with us have unabated permit violations or have been the subject of permit or reclamation bond revocation or suspension. These regulations define certain relationships, such as owning over 50% of stock in an entity or having the authority to determine the manner in which the entity conducts mining operations, as constituting ownership and control. Certain other relationships are presumed to constitute ownership or control, including being an officer or director of an entity or owning between 10% and 50% of the mining operator. This presumption, in some cases, can be rebutted where the person or entity can demonstrate that it in fact does not or did not have authority directly or indirectly to determine the manner in which the relevant coal mining operation is conducted. Thus, past or ongoing violations of federal and state mining laws by us or by coal mining operations owned or controlled by our significant stockholders, directors or officers or certain other third-party affiliates could provide a basis to revoke existing permits and to deny the issuance of additional permits or modifications or amendments of existing permits. This is known as being "permit-blocked." In recent years, the permitting required for coal mining has been the subject of increasingly stringent regulatory and administrative requirements and extensive litigation by environmental groups.

Once a permit application is prepared and submitted to the regulatory agency, it goes through a completeness review and technical review. Public notice of the proposed permit is given, which also provides for a comment period before a permit can be issued. Some SMCRA mine permits take over a year to prepare, depending on the size and complexity of the mine and may

take months or even years to be issued. Regulatory authorities have considerable discretion in the timing of the permit issuance and the public and other agencies have rights to comment on and otherwise engage in the permitting process, including through intervention in the courts.

The Abandoned Mine Land Fund, which is part of SMCRA, requires a fee on all coal produced. The proceeds are used to reclaim mine lands closed or abandoned prior to SMCRA's adoption in 1977. The current fee, which is effective through September 30, 2034, is \$0.224 per ton on surface-mined coal and \$0.096 per ton on deep-mined coal. For each of the years ended December 31, 2023 and 2022, we recorded \$2.0 million of expense related to these fees.

While SMCRA is a comprehensive statute, SMCRA does not supersede the need for compliance with other major environmental statutes, including the Endangered Species Act; Clean Air Act; Clean Water Act; Resource Conservation and Recovery Act ("RCRA") and Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA" or "Superfund").

Surety Bonds

Federal and state laws require us to obtain surety bonds or other approved forms of security to cover the costs of certain long-term obligations, including mine closure or reclamation costs under SMCRA, federal and state workers' compensation costs, coal leases and other miscellaneous obligations. As of December 31, 2023 and 2022, our posted third-party surety bond amount in all states where we operate was approximately \$177.1 million and \$165.6 million, respectively, which was used to primarily secure the performance of our reclamation and lease obligations.

Posting of a bond or other security with respect to the performance of reclamation obligations is a condition to the issuance of a permit under SMCRA. Under the terms of agreements we and Alpha Natural Resources, Inc. entered into in connection with the Alpha Natural Resources, Inc. Restructuring, we and Alpha Natural Resources, Inc. were required to replace Alpha Natural Resources, Inc.'s self-bonds with surety bonds, collateralized bonds, or other financial assurance mechanisms, over time and under applicable regulations. Self-bonding may not be available to us as a means to comply with our reclamation bonding obligations for the foreseeable future. In August 2016, OSM announced its decision to pursue a rulemaking to evaluate self-bonding for coal mines, including eligibility standards. OSM has not yet issued a proposed rule to address this issue.

Clean Air Act

The Clean Air Act and comparable state laws that regulate air emissions affect coal mining operations both directly and indirectly. Direct impacts on coal mining and processing operations include Clean Air Act permitting requirements and emission control requirements relating to particulate matter ("PM"), which may include controlling fugitive dust. The Clean Air Act indirectly affects coal mining operations by extensively regulating air emissions of particulate matter, sulfur dioxide, nitrogen oxides, mercury and other compounds emitted by coal-fired electricity generating plants or the use of met coal in connection with steelmaking operations. In recent years, Congress has considered legislation that would require increased reductions in emissions of sulfur dioxide, nitrogen oxide, and mercury. The general effect of emission regulations on coal-fired power plants could be to reduce demand for coal.

In addition to the greenhouse gas ("GHG") issues discussed below, the air emissions programs that may materially and adversely affect our operations, financial results, liquidity, and demand for coal, directly or indirectly, include, but are not limited to, the following:

- *Acid Rain.* Title IV of the Clean Air Act requires reductions of sulfur dioxide emissions by electric utilities. Affected electricity generators have sought to meet these requirements by, among other compliance methods, switching to lower sulfur fuels, installing pollution control devices, reducing electricity generating levels or purchasing or trading sulfur dioxide emission allowances. We cannot accurately predict the effect of these provisions of the Clean Air Act on us in future years.
- *NAAQS for Criteria Pollutants.* The Clean Air Act requires the EPA to set standards, referred to as National Ambient Air Quality Standards ("NAAQS"), for six common air pollutants, including nitrogen oxide, sulfur dioxide, particulate matter, and ozone. Areas that are not in compliance (referred to as "non-attainment areas") with these standards must take steps to reduce emissions levels. Over the past several years, the EPA has revised its NAAQS for nitrogen oxide, sulfur dioxide, particulate matter and ozone, in each case making the standards more stringent. As a result, some states will be required to amend their existing individual state implementation plans ("SIPs") to achieve compliance with the new air quality standards. Other states will be required to develop new plans for areas that were previously in "attainment," but do not meet the revised standards. On December 7, 2020, the EPA announced the agency's final

decision to retain the existing National Ambient Air Quality Standards for particulate matter set by the Obama-Biden Administrations without changes. However, on January 6, 2023, the EPA proposed to revise the primary (health-based) annual standard for PM_{2.5}, from its current level of 12.0 parts per billion (ppb or µg/m³) to within the range of 9.0 to 10.0 µg/m³. The EPA also proposed revisions to some other provisions of the PM NAAQS, including revisions to the air quality index and monitoring requirements, but did not propose to change other key aspects of the standard: (i) the secondary (welfare-based) annual PM_{2.5} standard; (ii) the primary and secondary 24-hour PM_{2.5} standards and (iii) the primary and secondary 24-hour PM₁₀ standards. On February 7, 2024, the EPA revised the primary (health-based) annual standard for PM_{2.5}, from its current level of 12.0 µg/m³ to 9.0 µg/m³. The EPA retained the 24-hour standard and the current primary 24-hour standard for PM₁₀, which provides protection against coarse particles. The EPA is not changing the secondary (welfare-based) standards for fine particles and coarse particles at this time.

In October 2015, the EPA finalized the NAAQS for ozone pollution and reduced the limit to 70 ppb from the previous 75 ppb standard. The EPA made the majority of area designations related to this rule on November 16, 2017 and June 4, 2018 and finalized designations for the remaining regions of the country on July 25, 2018. Under the revised NAAQS for ozone in particular, significant additional emissions control expenditures may be required at coal-fired power plants. The final rules and new standards may impose additional emissions control requirements on our customers in the electric generation, steelmaking, and coke industries. Although coal mining and processing operations may emit certain criteria pollutants, we operate in material compliance with our permits. However, our operations could be affected if the attainment status of the areas in which we operate changes in the future.

A suit by industry in the D.C. Circuit challenged the EPA's 2015 Ozone NAAQS (*Murray Energy Corp. v. EPA*), which resulted in the court upholding the rule with the exception of the secondary NAAQS standards addressing protection of animals, crops and vegetation, which were sent back to the EPA for further consideration. On December 23, 2020, the EPA announced its decision to retain, without changes, the 2015 ozone National Ambient Air Quality Standards set by the Obama-Biden Administration.

- *NO_x SIP Call*. The NO_x SIP Call program was established by the EPA in October of 1998 to reduce the transport of nitrogen oxide and ozone on prevailing winds from the Midwest and South to states in the Northeast, which said they could not meet federal air quality standards because of migrating pollution. The program is designed to reduce nitrogen oxide emissions by one million tons per year in 22 eastern states and the District of Columbia. As a result of the program, many power plants have been or will be required to install additional emission control measures, such as selective catalytic reduction devices. Installation of additional emission control measures will make it more costly to operate coal-fired power plants, potentially making coal a less attractive fuel. On February 26, 2019, the EPA published a final rule amending the NO_x SIP Call regulations to allow states to establish alternative monitoring and reporting requirements for certain sources.

On March 15, 2023, the EPA issued its Good Neighbor Plan rules (the "Good Neighbor Plan"), which secure significant reductions in cross-state air pollution of ozone-forming emissions of nitrogen oxides (NO_x) from power plants and industrial facilities. The Good Neighbor Plan is intended to reduce seasonal ozone-forming emissions of NO_x from power plants and industrial facilities in 23 states. Industry groups and the State of Ohio have filed lawsuits challenging the Good Neighbor Plan. Due to court orders staying implementation of certain aspect of the Good Neighbor Plan, the EPA is implementing the Good Neighbor Plan only in certain states. As of September 21, 2023, the Good Neighbor Plan's "Group 3" ozone-season NO_x control program for power plants is being implemented in the following states: Illinois, Indiana, Maryland, Michigan, New Jersey, New York, Ohio, Pennsylvania, Virginia, and Wisconsin. Due to the court orders, the EPA is not currently implementing the Good Neighbor Plan "Group 3" ozone-season NO_x control program for power plants in the following states: Alabama, Arkansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Nevada, Oklahoma, Texas, Utah, and West Virginia. On December 20, 2023, the United States Supreme Court agreed to hear oral argument in four consolidated cases challenging the Good Neighbor Plan. The Court has scheduled oral argument for the cases in its February 2024 term and directed the parties to address, among other issues, whether the emissions controls imposed by the Good Neighbor Plan are reasonable regardless of the number of states subject to the Good Neighbor Plan.

- *Cross-State Air Pollution Rule*. In June 2011, the EPA finalized the CSAPR, which required 28 states in the Midwest and the eastern seaboard of the U.S. to reduce power plant emissions that cross state lines and contribute to ozone and/or fine particle pollution in other states. Nitrogen oxide and sulfur dioxide emission reductions were scheduled to commence in 2012, with further reductions effective in 2014. However, implementation of CSAPR's requirements were delayed due to litigation. In October 2014, the EPA issued an interim final rule reconciling the CSAPR with the Court's order, which called for Phase 1 implementation in 2015 and Phase 2 implementation in 2017.

In September 2016, the EPA finalized an update to the CSAPR ozone season program by issuing the Final CSAPR Update rule. The Final CSAPR Update rule is the subject of a pending legal challenge in the D.C. Circuit by five states. In September 2019, the D.C. Circuit concluded that the rule was valid in certain respects but that it failed to ensure that pollution from upwind states would not prevent downwind states from meeting air quality standards in a timely manner. The court directed the EPA to revise the rule to address this failure. For states to meet their requirements under the Final CSAPR Update rule, a number of coal-fired electric generating units will likely need to be retired, rather than retrofitted with the necessary emission control technologies, reducing demand for thermal coal. On October 15, 2020, the EPA proposed the Revised CSAPR Update rule in order to fully address 21 states' outstanding interstate pollution transport obligations for the 2008 ozone National Ambient Air Quality Standards. The EPA finalized the Revised CSAPR Update rule on April 30, 2021. The EPA estimated that the Revised CSAPR Update rule will reduce NOX emissions from power plants in 12 states in the eastern United States by 17,000 tons in 2021 compared to projections without the rule, yielding public health and climate benefits that are valued, on average, at up to \$2.8 billion each year from 2021 to 2040. An industry group challenged the Revised CSAPR Update rule in the U.S. Court of Appeals for the District of Columbia. On March 3, 2023, the Court rejected this challenge.

- *Mercury and Hazardous Air Pollutants.* In February 2012, the EPA formally adopted a rule to regulate emissions of mercury and other metals, fine particulates, and acid gases such as hydrogen chloride from coal- and oil-fired power plants, referred to as "MATS." In March 2013, the EPA finalized reconsideration of the MATS rule as it pertains to new power plants, principally adjusting emissions limits for new coal-fired units to levels considered attainable by existing control technologies. In subsequent litigation, the U.S. Supreme Court struck down the MATS rule based on the EPA's failure to take costs into consideration. The D.C. Circuit allowed the current rule to stay in place until the EPA issued a new finding. In April 2016, the EPA issued a final finding that it is appropriate and necessary to set standards for emissions of air toxics from coal- and oil-fired power plants. However, in April 2017, the EPA indicated in a court filing that it may reconsider this finding, and on April 27, 2017, the D.C. Circuit stayed the litigation. In August 2018, the EPA stated that it plans on sending a draft proposal to the White House questioning the EPA's earlier finding and intends to reevaluate the MATS rule itself.

On December 27, 2018, the EPA issued a proposed revised Supplemental Cost Finding for MATS, as well as the Clean Air Act required "risk and technology review." After taking account of both the cost to coal- and oil-fired power plants of complying with the MATS rule and the benefits attributable to regulating hazardous air pollutant ("HAP") emissions from these power plants, the EPA proposed to determine that it is not "appropriate and necessary" to regulate HAP emissions from power plants under Section 112 of the Clean Air Act. The emission standards and other requirements of the MATS rule, first promulgated in 2012, would remain in place, however, since the EPA did not propose to remove coal- and oil-fired power plants from the list of sources that are regulated under Section 112 of the Act.

On April 15, 2020, the EPA established a new subcategory in the MATS for electric utility steam generating units ("EGU's") that burn eastern bituminous coal refuse ("EBCR"). Coal refuse includes low-quality coal mixed with rock, clay and other material. The EPA is also establishing emission standards from these facilities. The new subcategory and emission standards will affect six existing EGUs that burn EBCR.

On May 22, 2020, the EPA published the completed reconsideration of the appropriate and necessary finding for the MATS. The EPA concluded that it is not "appropriate and necessary" to regulate electric utility steam generating units under Section 112 of the Clean Air Act. The EPA is also taking final action on the residual risk and technology review that is required by the CAA Section 112. The EPA states, "emissions of HAP have been reduced such that residual risk is at acceptable levels, that there are no developments in HAP emissions controls to achieve further cost-effective reductions beyond the current standard, and, therefore, no changes to the MATS rule are warranted."

On February 15, 2023, however, the EPA revoked its 2020 finding that it was not appropriate and necessary to regulate coal- and oil-fired power plants under Section 112 of the Clean Air Act, which regulates HAP emissions. The EPA reviewed the 2020 finding and stated that it considered updated information on both (i) the public health burden associated with HAP emissions from coal- and oil-fired power plants; and (ii) the costs associated with reducing those emissions under the MATS rule. On April 3, 2023, the EPA issued a proposed rule that the EPA said would strengthen and update the MATS for power plants to reflect recent developments in control technologies and the performance of these plants.

Apart from MATS, several states have enacted or proposed regulations requiring reductions in mercury emissions from coal-fired power plants, and federal legislation to reduce mercury emissions from power plants has been proposed. Regulation of mercury emissions by the EPA (and in particular, the reconsideration by the current EPA of

any rulemaking relating to the MATS rule during the prior presidential administration), states, Congress, or pursuant to an international treaty may further decrease the demand for coal. Like CSAPR, MATS and other similar future regulations could accelerate the retirement of a significant number of coal-fired power plants, in addition to the significant number of plants and units that have already been retired as a result of environmental and regulatory requirements and uncertainties adversely impacting coal-fired generation. Such retirements would likely adversely impact our business.

- *Regional Haze, New Source Review and Methane.* The EPA's regional haze program is intended to protect and improve visibility at and around national parks, national wilderness areas and international parks. In December 2011, the EPA issued a final rule under which the emission caps imposed under CSAPR for a given state would supplant the obligations of that state with regard to visibility protection. In May 2012, the EPA finalized a rule that allows the trading programs in CSAPR to serve as an alternative to determining source-by-source Best Available Retrofit Technology ("BART"). This rule provides that states in the CSAPR region can substitute participation in CSAPR for source-specific BART for sulfur dioxide and/or nitrogen oxides emissions from power plants. This program may result in additional emissions restrictions from new coal-fueled power plants whose operations may impair visibility at and around federally protected areas. This program may also require certain existing coal-fueled power plants to install additional control measures designed to limit haze causing emissions, such as sulfur dioxide, nitrogen oxides, volatile organic chemicals and particulate matter. These limitations could result in additional coal plant closures and affect the future market for coal. A final Regional Haze rule was published on January 10, 2017.

In addition, the EPA's new source review program under certain circumstances requires existing coal-fired power plants, when modifications to those plants significantly change emissions, to install the more stringent air emissions control equipment required of new plants.

Litigation seeking to force the EPA to list coal mines as a category of air pollution sources that endanger public health or welfare under Section 111 of the CAA and establish standards to reduce emissions from sources of methane and other emissions related to coal mines was dismissed by the D.C. Circuit in May 2014. In that case, the Court denied a rulemaking petition citing agency discretion and budgetary restrictions, and ruled that the EPA has reasonable discretion to carry out its delegated responsibilities, which include determining the timing and relative priority of its regulatory agenda. In July 2014, the D.C. Circuit denied a petition seeking a rehearing of the case en banc. Litigation regarding these issues may continue and could result in the need for additional air pollution controls for coal-fired units and our operations.

Global Climate Change

Global climate change initiatives and public perceptions have resulted, and are expected to continue to result, in decreased coal-fired power plant capacity and utilization, phasing out and closing many existing coal-fired power plants, reducing or eliminating construction of new coal-fired power plants in the United States and certain other countries, increased costs to mine coal and decreased demand and prices for thermal coal.

There are three important sources of GHGs associated with the coal industry: first, the end use of our coal by our customers in electricity generation, coke plants, and steelmaking is a source of GHGs; second, combustion of fuel for mining equipment used in coal production; and third, coal mining can release methane, a GHG, directly into the atmosphere. GHG emissions from coal consumption and production are subject to pending and proposed regulation as part of initiatives to address global climate change.

The Kyoto Protocol to the 1992 United Nations Framework Convention on Climate Change (the "Kyoto Protocol") became effective in 2005 and bound those developed countries that ratified it (which the U.S. did not do) to reduce their global GHG emissions. In December 2015, the United States and almost 200 nations agreed to the Paris Agreement, which entered into force on November 4, 2016 and has the long-term goal to limit global warming to below two degrees Celsius by 2100 from temperatures in the pre-industrial era. Although this agreement does not create any binding obligations for nations to limit their GHG emissions, it does include pledges to voluntarily limit or reduce future emissions. On June 1, 2017, the Trump administration announced that the U.S. would withdraw from the Paris Agreement. This withdrawal formally took effect on November 4, 2020. However, on February 19, 2021, the U.S. formally rejoined the Paris Agreement. In addition, numerous U.S. governors, mayors and businesses have pledged their commitments to the goals of the Paris Agreement. The Glasgow Climate Pact reached at the 2021 United Nations Climate Change Conference (COP26), though not legally binding, contains a plan to reduce use of coal by 40%. The COP28 United Nations Climate Change Conference was held in Dubai, the United Arab Emirates, held from November 30 to December 13, 2023. COP28 was intended to evaluate the world's efforts to address climate change under the Paris Agreement. At the end of the COP28 conference, the participating countries agreed to a call on

governments worldwide to speed up the transition away from fossil fuels to renewables such as wind and solar power. These commitments and agreements could further reduce demand and prices for our coal.

In 2009, the EPA issued a finding that emissions of carbon dioxide, methane and other GHGs present an endangerment to public health and the environment. The EPA has since adopted regulations under existing provisions of the CAA pursuant to this finding. For example, the EPA has adopted rules requiring the monitoring and reporting of GHG emissions from specified large GHG emission sources in the U.S., including coal-fired electric power plants and steel-making operations. The EPA has also promulgated the Tailoring Rule, which requires that all new or modified stationary sources of GHGs that will emit more than 75,000 tons of carbon dioxide per year and are otherwise subject to CAA regulation, and any other facilities that will emit more than 100,000 tons of carbon dioxide per year, to undergo prevention of significant deterioration (“PSD”) permitting, which requires that the permitted entity adopt the best available control technology.

In June 2014, the U.S. Supreme Court addressed whether the EPA’s regulation of GHG emissions from new motor vehicles properly triggered GHG permitting requirements for stationary sources under the CAA as well as the validity of the Tailoring Rule under the CAA. The decision reversed, in part, and affirmed, in part, a 2012 D.C. Circuit decision that upheld the Tailoring Rule. Specifically, the Court held that the EPA exceeded its statutory authority when it interpreted the CAA to require PSD and Title V permitting for stationary sources based on their potential GHG emissions. However, the Court also held that the EPA’s determination that a source already subject to the PSD program due to its emission of conventional pollutants may be required to limit its GHG emissions by employing the “best available control technology” was permissible. As a result, the EPA is now requiring new sources already subject to the PSD program, including coal-fired power plants, to undergo control technology reviews for GHGs (predominately carbon dioxide) as a condition of permit issuance. These reviews may impose limits on GHG emissions, or otherwise be used to compel consideration of alternative fuels and generation systems, as well as increase litigation risk for-and so discourage development of-coal-fired power plants.

On August 3, 2015, the EPA released a final rule establishing New Source Performance Standards (“NSPS”) for emissions of carbon dioxide for new, modified and reconstructed fossil fuel-fired electric generating units (“Power Plant NSPS”). The final rule requires that newly constructed fossil fuel-fired steam generating units achieve an emission standard for carbon dioxide of 1,400 lb CO₂/MWh-gross. The standard is based on the performance of a supercritical pulverized coal boiler implementing partial carbon capture and storage (“CCS”). Modified and reconstructed fossil fuel fired steam generating units must implement the most efficient generation achievable through a combination of best operating practices and equipment upgrades, to meet an emission standard consistent with best historical performance.

Reconstructed units must implement the most efficient generating technology based on the size of the unit (supercritical steam conditions for larger units, to meet a standard of 1,800 lb CO₂/MWh-gross, and subcritical conditions for smaller units to meet a standard of 2,000 lb CO₂/MWh-gross). Numerous legal challenges to the final rule are currently pending. There is a risk that CCS technology may not be commercially practical in limiting emissions as otherwise required by the rule or similar rules that may be proposed in the future. If such legislative or regulatory programs are adopted or maintained, and economic, commercially available carbon capture technology for power plants is not developed or adopted in a timely manner, it would negatively affect our customers and would further reduce the demand for coal as a fuel source, causing coal prices and sales of our coal to decline, perhaps materially.

In August 2015, the EPA issued the Clean Power Plan (“CPP”), a final rule that establishes carbon pollution standards for existing power plants, called CO₂ emission performance rates. The EPA expected each state to develop implementation plans for power plants in its state to meet the individual state targets established in the CPP. The CPP was immediately subject to legal challenges and was stayed before it was implemented. On July 8, 2019, the EPA, published the ACE Rule, a replacement of the CPP. In contrast to the CPP, which called for the shifting of electricity generation away from coal-fired sources toward natural gas and renewables, the ACE Rule focuses on reducing GHG emissions from existing coal-fired plants by requiring states to mandate the implementation of a range of technologies at power plants designed to improve their heat rate (i.e., decrease the amount of fuel necessary to generate the same amount of electricity). However, on January 19, 2021, the Court of Appeals of the District of Columbia struck down the ACE rule. The EPA has since announced an intent to consider new regulations governing carbon emissions from existing power plants. More stringent standards for carbon dioxide emissions as a result of these rulemakings could further reduce demand for coal, and our business would be adversely impacted.

The United States Congress has, from time to time, considered legislation to reduce GHG emissions, such as a resolution referred to as the Green New Deal, which was introduced in the U.S. House of Representatives in February 2019 and similar legislation may be introduced in the current Congressional term. To date, Congress has not passed a bill specifically addressing GHG regulation. In addition, various states and regions have adopted initiatives to reduce, and in some cases phase out, GHG emissions and certain governmental bodies, including the states of Virginia and California, have considered or are considering the imposition of fees or taxes based on the emission of GHGs by certain facilities. A number of states have enacted legislative

mandates requiring electricity suppliers to use renewable energy sources to generate a certain percentage of power. For example, on September 10, 2018, California adopted a law that requires all electricity consumed by the state to be generated from renewable sources such as solar, wind and hydropower by 2045.

On October 7, 2023, California Governor Gavin Newsom signed three landmark climate disclosure bills that are more stringent than the proposed SEC rules. California's group of new laws address (i) GHG emissions reporting in compliance with the Greenhouse Gas Protocol ("GHG Protocol"), (ii) climate-related financial risk reporting in accordance with the recommendations of the Task Force on Climate-Related Financial Disclosures ("TCFD"), and (iii) disclosure of information about certain emissions claims and the sale and use of carbon offsets. Although the SEC's climate disclosure proposal includes GHG Protocol and TCFD requirements, unlike the SEC's proposed rule, the California requirements apply to certain private and public companies with business activities in California. AB 1305 addresses voluntary carbon market disclosures. It applies to entities that (i) operate and make emissions claims within California; or (ii) buy or sell carbon offsets within California. SB 253 is the Climate Corporate Data Accountability Act. It applies only to business entities with annual revenue over \$1 billion that do business in California. It requires disclosure of scope 1, scope 2, and scope 3 GHG emissions. Annual reporting of scope 1 and scope 2 GHG emissions will be required for covered entities beginning in 2026 (for the 2025 fiscal year). Annual reporting of scope 3 GHG emissions will be required beginning in 2027. SB 261 addresses climate-related financial risks of greenhouse gases. It applies to business entities that do business in California if their annual revenue exceeds \$500 million. Disclosure will be required on or before January 1, 2026 and biennially thereafter. The Company currently does not do business in California.

In addition, certain banks and other financing sources have taken actions to limit available financing for the development of new coal-fueled power plants, which also may adversely affect the future global demand for coal. Further, there have been recent efforts by members of the general financial and investment communities, such as investment advisors, sovereign wealth funds, public pension funds, universities and other groups, to divest themselves and to promote the divestment of securities issued by companies involved in the fossil fuel extraction market, such as coal producers. Those entities also have been pressuring lenders to limit financing available to such companies. These efforts may adversely affect the market for our securities and our ability to access capital and financial markets in the future.

Furthermore, several well-funded non-governmental organizations have explicitly undertaken campaigns to minimize or eliminate the use of coal as a source of electricity generation. These efforts, as well as concerted conservation and efficiency efforts that result in reduced electricity consumption, could cause coal prices and sales of our coal to materially decline and possibly increase our operating costs.

These and other current or future global climate change laws, regulations, court orders or other legally enforceable mechanisms, or related public perceptions regarding climate change, are expected to require additional controls on coal-fired power plants and industrial boilers and may cause some users of coal to further switch from coal to alternative sources of fuel, thereby depressing demand and pricing for coal.

Clean Water Act

The CWA and corresponding state and local laws and regulations affect coal mining operations by restricting the discharge of pollutants, including dredged or fill materials, into waters of the United States. The CWA provisions and associated state and federal regulations are complex and subject to amendments, legal challenges and changes in implementation. Legislation that seeks to clarify the scope of CWA jurisdiction has also been considered by Congress. Recent court decisions, regulatory actions and proposed legislation have created uncertainty over CWA jurisdiction and permitting requirements.

CWA requirements that may directly or indirectly affect our operations include the following:

Wastewater Discharge

Prior to discharging any pollutants into waters of the United States, coal mining companies must obtain a National Pollutant Discharge Elimination System ("NPDES") permit from the appropriate state or federal permitting authority. Section 402 of the CWA creates a process for establishing effluent limitations for discharges to streams that are protective of water quality standards through the NPDES program, and corresponding programs implemented by state regulatory agencies. Regular monitoring, reporting and compliance with performance standards are preconditions for the issuance and renewal of NPDES permits that govern discharges into waters of the United States. Failure to comply with the CWA or NPDES permits can lead to the imposition of significant penalties, litigation, compliance costs and delays in coal production. Furthermore, the imposition of future restrictions on the discharge of certain pollutants into waters of the United States could increase the difficulty of obtaining and complying with NPDES permits, which could impose additional time and cost burdens on our operations. For

instance, waters that states have designated as impaired (i.e., as not meeting present water quality standards) are subject to Total Maximum Daily Load regulations, which may lead to the adoption of more stringent discharge standards for our coal mines and could require more costly treatment.

In addition, when water quality in a receiving stream is of high quality, states are required to conduct an anti-degradation review before approving discharge permits. Anti-degradation policies may increase the cost, time and difficulty associated with obtaining and complying with NPDES permits and may also require more costly treatment.

On March 5, 2014, the EPA, the U.S. Department of Justice (“DOJ”), West Virginia Department of Environmental Protection, the Pennsylvania Department of Environmental Protection and the Kentucky Energy and Environment Cabinet filed a Complaint against Alpha Natural Resources, Inc. and its permit holding subsidiaries in Kentucky, Pennsylvania, Tennessee, Virginia and West Virginia alleging that Alpha Natural Resources, Inc.’s mining affiliates in those states and in Tennessee and Virginia exceeded certain water discharge permit limits during the period of 2006 to 2013 and simultaneously entered into a Consent Decree with Alpha Natural Resources, Inc. resolving their claims. The Consent Decree was entered by the Southern District of West Virginia on November 26, 2014 and amended on June 12, 2016 and again on February 28, 2018 (the “Alpha Natural Resources, Inc. Consent Decree”). As part of the Alpha Natural Resources, Inc. Consent Decree, Alpha Natural Resources, Inc. agreed to implement an integrated environmental management system and an expanded auditing/reporting protocol, install selenium and osmotic pressure treatment facilities at specific locations, and certain other measures. The Alpha Natural Resources, Inc. Consent Decree required Alpha Natural Resources, Inc. to pay \$27.5 million in civil penalties, to be divided among the federal government and state agencies. All required water treatment systems have been constructed, the environmental management system has been implemented, and the other terms and conditions of the Alpha Natural Resources, Inc. Consent Decree have been substantially satisfied. On February 25, 2020, partial termination of the Consent Decree was granted by the EPA for all but 6 of the Alpha Natural Resources, Inc. Defendants. On January 29, 2021, full termination of the Consent Decree was granted for all the Defendants.

Dredge and Fill Permits

Many mining activities, including the development of settling ponds and the construction of certain sediment control structures, valley fills and surface impoundments, require permits from the U.S. Army Corps of Engineers (“COE”) under Section 404 of the CWA. Generally speaking, these Section 404 permits allow the placement of dredge and fill materials into navigable waters of the United States, including wetlands, streams, and other regulated areas. The COE has issued general “nationwide” permits for specific categories of activities that are similar in nature and that are determined to have minimal adverse effects on the environment. Permits issued pursuant to Nationwide Permits 5, 21, 49 and 50 generally authorize the disposal of dredged or fill material from surface coal mining activities into waters of the United States, subject to certain restrictions. Nationwide Permits are typically reissued for a five-year period and require appropriate mitigation, and permit holders must receive explicit authorization from the COE before proceeding with proposed mining activities. On December 27, 2021 (affecting Nationwide Permit numbers including 5 and 49) and January 13, 2021 (affecting Nationwide Permit numbers including 21 and 50), the COE published its final rules reissuing and modifying its Nationwide Permits. These Nationwide Permits now expire on March 14, 2026. The January 13, 2021 final rule finalized the proposed removal of the 300 linear foot limit for losses of stream bed from several of the Nationwide permits. Expansion of our mining operations into new areas may trigger the need for individual COE approvals, which could be more costly and take more time to obtain.

In January 2020, the EPA and the COE issued a final rule that attempts to clarify the Clean Water Act's (“CWA”) jurisdictional reach over waters of the United States, referred to as the Navigable Waters Protection Rule (“NWPR”). The rule replaces a rule issued in June 2015 by the previous presidential administration, the Clean Water Rule. The Clean Water Rule was the subject of extensive legal challenges, injunctions and administrative action, and was formally repealed in December 2019. After the U.S. District Court for the District of Arizona vacated and remanded the NWPR on August 30, 2021, the EPA and the COE halted implementation of the NWPR nationwide and are interpreting “waters of the United States” consistent with the pre-2015 regulatory regime. On December 30, 2022, the EPA and COE announced the final Revised Definition of Waters of the United States rule, which reasserts the agencies’ CWA jurisdiction over wetlands and certain ephemeral streams. On January 18, 2023, the rule was published in the Federal Register. The rule was effective on March 20, 2023. Like the NWPR, the Revised Definition of Waters of the United States rule has been the subject of legal challenges. On May 25, 2023, the U.S. Supreme Court’s decision in *Sackett v. EPA* limited the jurisdiction of the EPA and the COE over wetlands. While the January 18, 2023 rule was not directly before the Court, the Court considered the jurisdictional standards set forth in the rule. In *Sackett*, the Court held that the Clean Water Act’s use of “waters” encompasses only those relatively permanent, standing or continuously flowing bodies of water forming geographical features that are described in ordinary parlance as streams, oceans, rivers, and lakes.

On August 29, 2023, the EPA and the COE issued a final rule to amend the January 2023 rule, to conform the definition of “waters of the United States” to the Supreme Court’s decision in Sackett. This conforming rule amends the provisions of the January 18, 2023 definition of “waters of the United States” that are invalid under the Supreme Court’s interpretation of the Clean Water Act in the Sackett decision. The final amended conforming rule became effective on September 8, 2023. Its ultimate impact on our operations remains uncertain until the agencies regularly implement and apply the rule.

Cooling Water Intake

In May 2014, the EPA issued a new final rule pursuant to Section 316(b) of the CWA that affects the cooling water intake structures at power plants in order to reduce fish impingement and entrainment. The rule is expected to affect over 500 power plants. These requirements could increase our customers’ costs and may adversely affect the demand for coal, which may materially impact our results or operations.

Effluent Guidelines

On November 3, 2015, the EPA published the final rule for Effluent Limitations Guidelines and Standards (“ELGS”), revising the regulations for the Steam Electric Power Generating category, which became effective on January 4, 2016. It establishes the first federal limits on the levels of arsenic, mercury, selenium and nitrate-nitrites in flue gas desulfurization that can be discharged as wastewater from power plants, based on technology improvements over the last three decades. On April 25, 2017, the EPA stayed the implementation of the rule indefinitely to allow for reconsideration. On August 31, 2020, the EPA finalized the rule to revise the ELGS. The 2020 rule changes the technology basis for treatment of Flue Gas Desulfurization Wastewater and Bottom Ash Transport Water.

Endangered Species Act

The ESA and counterpart state legislation protect species threatened with possible extinction. Protection of threatened and endangered species may have the effect of prohibiting or delaying us from obtaining mining permits and mine plan modifications and approvals, and may include restrictions on timber harvesting, road building and other mining activities in areas containing the affected species or their habitats. We may also need to obtain additional permits or approvals if the incidental take of these species in the course of otherwise lawful activity may occur, which could take more time, be more costly and have adverse effects on operations. A number of species indigenous to properties we control or surrounding areas are protected under the ESA including the Guyandotte River Crayfish and the Big Sandy River Crayfish. On January 28, 2020 the U.S. Fish & Wildlife Service (“FWS”) officially published the draft critical habitat designation for the Guyandotte River Crayfish and the Big Sandy River Crayfish in the Federal Register, starting the public comment period on the draft designations. On July 10, 2020, the FWS issued guidance regarding the preparation of protection and enhancement plans (“PEPs”) for coal mining operations located in the Guyandotte River Crayfish habitat in southern West Virginia. The guidance contains several suggestions for requirements to be included in PEPs for proposed mining operations, such as minimizing fill placement, retaining 100 foot vegetative buffers around streams and constructing stream crossings in periods of low flow. Certain other sensitive species that are not currently protected by the ESA may also require protection and mitigation efforts consistent with federal and state requirements.

After the Stream Protection Rule and the accompanying 2016 Biological Opinion were repealed in February 2017, OSM issued a Section 7(d) determination that reinitiated consultation with the FWS to develop a new Biological Opinion. The new Biological Opinion was released on October 16, 2020. One of the most notable changes is the incidental take coverage if there is no agreement between the state regulatory authority and the FWS at the conclusion of the dispute resolution process and the regulatory authority issues the permit. The new Biological Opinion states that “any prohibited take of listed species incidental to that permit action will not be exempted through this incidental take statement.” The Biological Opinion also includes discussion of OSM enforcement powers in primacy states potentially allowing the FWS to effect a permit veto via OSM enforcement actions. The new Biological Opinion could make the permitting process more difficult and expensive.

Resource Conservation and Recovery Act

RCRA affects coal mining operations by establishing requirements for the treatment, storage, and disposal of hazardous wastes. The EPA determined that coal combustion residuals (“CCR”) do not warrant regulation as hazardous wastes under RCRA in May 2000. Most state hazardous waste laws do not regulate CCR as hazardous wastes. The EPA also concluded that beneficial uses of CCR, other than for mine filling, pose no significant risk and no additional national regulations of such beneficial uses are needed. However, the EPA determined that national non-hazardous waste regulations under RCRA are warranted for certain wastes generated from coal combustion, such as coal ash, when the wastes are disposed of in surface impoundments or landfills or used as minefill. In December 2014, the EPA finalized regulations that address the management

of coal ash as a non-hazardous solid waste under Subtitle D. The rules impose engineering, structural and siting standards on surface impoundments and landfills that hold coal combustion wastes and mandate regular inspections. The rules also require fugitive dust controls and impose various monitoring, cleanup, and closure requirements. In July 2018, the EPA published a final rule extending certain deadlines under the original rules, granting certain authority to states with authorized CCR programs and establishing groundwater protection standards for certain constituents. The EPA and OSM plan additional rulemaking relating to CCR.

There have also been several legislative proposals that would require the EPA to further regulate the storage of CCR. For example, in December 2016, Congress passed the Water Infrastructure Improvements for the Nation Act, which allows states to establish permit programs to regulate the disposal of CCR units in lieu of the EPA's CCR regulations. These requirements, as well as any future changes in the management of CCR, could increase our customers' operating costs and potentially reduce their ability or need to purchase coal. In addition, contamination caused by the past disposal of CCR, including coal ash, can lead to material liability for our customers under RCRA or other federal or state laws and potentially further reduce the demand for coal.

Comprehensive Environmental Response, Compensation and Liability Act

CERCLA and similar state laws affect coal mining operations by, among other things, imposing cleanup requirements for threatened or actual releases of hazardous substances into the environment. Under CERCLA and similar state laws, joint and several liability may be imposed on hazardous substance generators, site owners, transporters, lessees and others regardless of fault or the legality of the original disposal activity. Although the EPA currently excludes most wastes generated by coal mining and processing operations from the primary hazardous waste laws, the disposal, release or spilling of some products used by coal companies in operations, such as chemicals, could trigger the liability provisions of CERCLA or similar state laws. Thus, we may be subject to liability under CERCLA and similar state laws for our current or former owned, leased or operated coal mines and property or those of our predecessors. We may be liable under CERCLA or similar state laws for the cleanup of hazardous substance contamination and natural resource damages at sites where we control surface rights. These liabilities could be significant and materially and adversely affect our financial results and liquidity.

Use of Explosives. Our surface mining operations are subject to numerous regulations relating to blasting activities. Pursuant to these regulations, we incur costs to design and implement blast schedules and to conduct pre-blast surveys and blast monitoring. In addition, the storage of explosives is subject to regulatory requirements. For example, pursuant to a rule issued by the U.S. Department of Homeland Security ("DHS") in 2007, facilities in possession of chemicals of interest (including ammonium nitrate at certain threshold levels) are required to complete a screening review. In 2011, the DHS published proposed regulations of ammonium nitrate under the Ammonium Nitrate Security Rule. Many of the requirements of the proposed regulations would be duplicative of those in place under the Bureau of Alcohol, Tobacco, Firearms and Explosives, including registration and background checks, and DHS has moved its 2011 rulemaking to a non-active status because the approach proposed was unlikely to deliver appreciable security benefits. Additional requirements may include tracking and verifications for each transaction related to ammonium nitrate. The outcome of these rulemakings could materially adversely affect our cost or ability to conduct our mining operations.

Other Environmental Laws

We are required to comply with numerous other federal, state and local environmental laws and regulations in addition to those previously discussed. These additional laws include, for example, the Safe Drinking Water Act, the Toxic Substances Control Act and transportation laws adopted to ensure the appropriate transportation of our coal both nationally and internationally. Laws, regulations, and treaties of other countries may also adversely impact our export sales by reducing demand for our coal as a source of power generation in those countries.

Federal and State Nuclear Material Regulations

Many of our operations use equipment with radioactive sources primarily for coal density measurement. Use of this equipment must be approved by the U. S. Nuclear Regulatory Authority or the state agency that has been delegated this authority.

Mine Safety and Health

Stringent health and safety standards have been in effect since Congress enacted the Coal Mine Health and Safety Act of 1969. The Federal Mine Safety and Health Act of 1977 ("Mine Act") significantly expanded the enforcement of safety and health standards and imposed safety and health standards on all aspects of mining operations. All of the states in which we

operate also have state programs for mine safety and health regulation and enforcement. Collectively, federal and state safety and health regulation in the coal mining industry is among the most comprehensive and pervasive systems for protection of employee health and safety affecting any segment of U.S. industry. The Mine Act is a strict liability statute that requires mandatory inspections of surface and underground coal mines and preparation plants and requires the issuance of enforcement action when it is believed that a standard has been violated. While this regulation has a significant effect on our operating costs, our U.S. competitors are subject to the same degree of regulation.

In 2006, in response to underground mine accidents, Congress enacted the Mine Improvement and New Emergency Response Act (the “MINER Act”). The MINER Act significantly amended the Mine Act, requiring, among other items, improvements in mine safety practices, increasing criminal penalties and establishing a maximum civil penalty for non-compliance, and expanding the scope of federal oversight, inspection and enforcement activities. Since the passage of the MINER Act, enforcement scrutiny has increased, including more inspection hours at mine sites, an increase in the number of inspections and an increase in the number of issuances and related penalties. Various states also have enacted their own new laws and regulations addressing many of these same subjects. The U.S. Mine Safety and Health Administration (“MSHA”) continues to interpret and implement various provisions of the MINER Act, along with introducing new proposed regulations and standards. For example, the second phase of MSHA’s respirable coal mine dust rule went into effect in February 2016 and requires increased sampling frequency and the use of continuous personal dust monitors. In August 2016, the third and final phase of the rule became effective, reducing the overall respirable dust standard in coal mines from 2.0 to 1.5 milligrams per cubic meter of air. Additionally, MSHA’s proposed rule, Lowering Miners’ Exposure to Respirable Crystalline Silica and Improving Respiratory Protection, was published in the federal register on July 13, 2023. The proposed rule would set the permissible exposure limit of respirable crystalline silica at 50 micrograms per cubic meter of air ($\mu\text{g}/\text{m}^3$) for a full shift exposure, calculated as an 8-hour time weighted average, for all miners. The proposal also includes other requirements to protect miner health and update existing respiratory protection requirements. The written comment period on the proposed rule was originally scheduled to end on August 28, 2023, and was later extended to September 11, 2023. MSHA held three public hearings to give stakeholders the opportunity to present testimony, written comments, and other documentary evidence on the proposed rule. The final rule is anticipated to be published in 2024. Our compliance with these or any other new mine health and safety regulations could increase our mining costs. If we were found to be in violation of these regulations we could face penalties or restrictions that may materially and adversely affect our operations, financial results and liquidity. Under the Black Lung Benefits Revenue Act of 1977 and the Black Lung Benefits Reform Act of 1977, as amended in 1981, each coal mine operator must secure payment of federal black lung benefits to claimants who are current and former employees and to a trust fund for the payment of benefits and medical expenses to claimants who last worked in the coal industry prior to July 1, 1973. Effective January 1, 2022, the trust fund was funded by an excise tax on coal sold of \$0.50 per ton for deep-mined coal and \$0.25 per ton for surface-mined coal, neither amount to exceed 2% of the gross sales price. Effective October 1, 2022, the trust fund was funded by an excise tax on coal sold of \$1.10 per ton for deep-mined coal and \$0.55 per ton for surface-mined coal, neither amount to exceed 4.4% of the gross sales price. The excise tax does not apply to coal shipped outside the United States. For the years ended December 31, 2023 and 2022, we recorded \$4.6 million and \$2.6 million, respectively, of expense related to this excise tax.

The Patient Protection and Affordable Care Act (“PPACA”) introduced significant changes to the federal black lung program, including an automatic survivor benefit paid upon the death of a miner with an awarded black lung claim, and established a rebuttable presumption with regard to pneumoconiosis among miners with 15 or more years of coal mine employment that are totally disabled by a respiratory condition. On January 18, 2023, the U.S. Department of Labor announced a notice of proposed rulemaking by its Office of Workers’ Compensation Programs to revise regulations governing the standards related to self-insurance by coal mine operators. The proposed rule would update the standards coal operators must meet to self-insure, modernize and streamline the application process and fix the amount of security applicants must post. The proposed rule would also clarify acceptable forms of security and establish an appeals process. Comments on the proposed rule were originally due no later than March 20, 2023. The Department of Labor subsequently extended the deadline for comments until April 19, 2023, and has not yet issued a final rule.

Coal Industry Retiree Health Benefit Act of 1992

Unlike many companies in the coal business, we do not have any liability under the Coal Industry Retiree Health Benefit Act of 1992 (the “Coal Act”), which requires the payment of substantial sums to provide lifetime health benefits to union-represented miners (and their dependents) who retired before 1992, because liabilities under the Coal Act that had been imposed on Alpha Natural Resources, Inc. were settled in the bankruptcy process.

GLOSSARY

Acquisition. Refers to the transaction by which the Company acquired certain of Alpha Natural Resources Inc.'s core coal operations as part of the Alpha Natural Resources, Inc. Restructuring.

Alpha. Alpha Metallurgical Resources, Inc. (the "Company") (previously named Contura Energy, Inc.).

Alpha Natural Resources, Inc. Restructuring. On August 3, 2015, Alpha Natural Resources, Inc. and each of its wholly owned domestic subsidiaries other than ANR Second Receivables Funding LLC (collectively, the "Debtors") filed voluntary petitions for relief under Chapter 11 of the U.S. Bankruptcy Code in the United States Bankruptcy Court for the Eastern District of Virginia (the "VA Bankruptcy Court"). The VA Bankruptcy Court approved the Debtors' Plan of Reorganization on July 7, 2016. On July 26, 2016, a consortium of former creditors of the Debtors acquired the Company's common stock in exchange for a partial release of their creditor claims pursuant to the Debtors' bankruptcy settlement. The Debtors, collectively, were a coal producer with operations in Central Appalachia, Northern Appalachia, and the Powder River Basin.

Ash. Impurities consisting of iron, alumina and other incombustible matter that are contained in coal. Since ash increases the weight of coal, it adds to the cost of handling and can affect the burning characteristics of coal.

Bituminous coal. Coal used primarily to generate electricity and to make coke for the steel industry with a heat value ranging between 10,500 and 15,500 BTUs per pound.

British Thermal Unit or BTU. A measure of the thermal energy required to raise the temperature of one pound of pure liquid water one degree Fahrenheit at the temperature at which water has its greatest density (39 degrees Fahrenheit).

Central Appalachia or CAPP. Coal producing area in eastern Kentucky, Virginia, southern West Virginia and a portion of eastern Tennessee.

Coal reserves. The economically mineable part of a measured or indicated coal resource, which includes diluting materials and allowances for losses that may occur when coal is mined or extracted.

Coal resources. Coal deposits in such form, quality, and quantity that there are reasonable prospects for economic extraction.

Coal seam. Coal deposits occur in layers. Each layer is called a "seam."

Coke. A hard, dry carbon substance produced by heating coal to a very high temperature in the absence of air. Coke is used in the manufacture of iron and steel. Its production results in a number of useful byproducts.

Coking coal. Coal used to produce coke, the primary source of carbon used in steelmaking.

Cumberland Back-to-Back Coal Supply Agreement. Certain agreements with Iron Senergy under which Iron Senergy would sell to the Company all of the coal that the Company was obligated to sell to customers under Cumberland coal supply agreements ("Cumberland CSAs") which existed as of the transaction closing date but did not transfer to Iron Senergy at closing (each, a "Cumberland Back-to-Back Coal Supply Agreement"). Each Cumberland Back-to-Back Coal Supply Agreement had economic terms identical to, but offsetting, the related Cumberland CSA. If a Cumberland customer subsequently consented to assign a Cumberland CSA to Iron Senergy after closing, the related Cumberland CSA would immediately and automatically transfer to Iron Senergy and the related Cumberland Back-to-Back Coal Supply Agreements executed by the parties would thereupon terminate as set forth therein.

Development stage property. A property with disclosed coal reserves but no material extraction.

ESG. Environmental, social and governance sustainability criteria.

ESM Transaction. The sale by Blackjewel L.L.C. ("Blackjewel") of the Eagle Butte and Belle Ayr mines located in Wyoming (the "Western Mines" or "Western Assets") to Eagle Specialty Materials ("ESM"), an affiliate of FM Coal, LLC on October 18, 2019. The ESM Transaction was approved by the United States Bankruptcy Court for the Southern District of West Virginia (the "WV Bankruptcy Court") pursuant to an order on October 4, 2019. The Company was the former owner of the Western Assets, having sold them to Blackjewel in December 2017.

Exploration stage property. A property with no disclosed coal reserves.

High-Vol A. A coking coal used in steel production with a volatile matter content between 31% and 34.5% on a dry basis.

High-Vol B. A coking coal used in steel production with a volatile matter content between 34.5% and 38% on a dry basis.

Indicated coal resource. That part of a coal resource for which quantity and quality are estimated on the basis of adequate geological evidence and sampling sufficient to establish geological and quality continuity with reasonable certainty.

Inferred coal resource. That part of a coal resource for which quantity and quality are estimated on the basis of limited geological evidence and sampling sufficient to establish that geological and quality continuity are more likely than not. Given the higher level of geological uncertainty, inferred coal resources are not considered when assessing the economic viability of a mining project or determining coal reserves.

Initial assessment. A preliminary technical and economic study of the economic potential of all or parts of mineralization to support the disclosure of mineral resources.

In situ coal resources. Coal resources stated on an in-seam dry basis (excluding surface and inherent moisture) with no consideration for dilution or losses that may occur when coal is mined or extracted.

Longwall mining. The most productive underground mining method in the United States. A rotating drum is advanced mechanically across the face of coal, and a hydraulic system supports the roof of the mine while the drum advances through the coal. Chain conveyors then move the loosened coal to a standard underground mine conveyor system for delivery to the surface.

Low-Vol. A coking coal used in steel production with a volatile matter content between 16% - 23% on a dry basis.

Marketable coal reserves. Coal reserves on a moist basis (including surface and inherent moisture) after considering dilution and losses that may occur when coal is mined or extracted.

Measured coal resource. That part of a coal resource for which quantity and quality are estimated on the basis of conclusive geological evidence and sampling sufficient to test and confirm geological and quality continuity.

Merger. Merger with ANR, Inc. and Alpha Natural Resources Holdings, Inc. completed on November 9, 2018.

Metallurgical coal. The various grades of coal suitable for carbonization to make coke for steel manufacture. Also known as “met” coal, its quality is primarily differentiated based on volatility or its percent of volatile matter. Met coal typically has a particularly high BTU but low ash and sulfur content.

Mid-Vol. A coking coal used in steel production with a volatile matter content between 23% -31% on a dry basis.

Northern Appalachia or NAPP. Coal producing area in Maryland, Ohio, Pennsylvania and northern West Virginia.

Operating Margin. Coal revenues less cost of coal sales.

Powder River Basin or PRB. Coal producing area in northeastern Wyoming and southeastern Montana.

Pre-feasibility study. A comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred method of mining or pit configuration, an effective method of mineral processing and an effective plan to sell the product has been determined.

Preparation plant. A preparation plant is a facility for crushing, sizing and washing coal to remove impurities and prepare it for use by a particular customer. The washing process has the added benefit of removing some of the coal’s sulfur content. A preparation plant is usually located on a mine site, although one plant may serve several mines.

Probable mineral 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.

Productivity. As used in this report, refers to clean metric tons of coal produced per underground man hour worked, as published by the MSHA.

Proven mineral reserve. The economically mineable part of a measured coal resource.

Qualified person. A mineral industry professional as defined in subpart 1300 of Regulation S-K.

Reclamation. The process of restoring land and the environment to their original state following mining activities. The process commonly includes “recontouring” or reshaping the land to its approximate original appearance, restoring topsoil and planting native grass and ground covers. Reclamation operations are usually under way before the mining of a particular site is completed. Reclamation is closely regulated by both state and federal law.

Roof. The stratum of rock or other mineral above a coal seam; the overhead surface of a coal working place.

Surface mine. A mine in which the coal lies near the surface and can be extracted by removing the covering layer of soil.

Thermal coal. Coal used by power plants and industrial steam boilers to produce electricity, steam or both. It generally is lower in BTU heat content and higher in volatile matter than metallurgical coal.

Tons. A “short” or net ton is equal to 2,000 pounds. A “long” or British ton is equal to 2,240 pounds; a “metric” ton (or “tonne”) is approximately 2,205 pounds. Tonnage amounts are stated in short tons, unless otherwise indicated.

UMWA. United Mine Workers of America.

Underground mine. Also known as a “deep” mine. Usually located several hundred feet below the earth’s surface, an underground mine’s coal is removed mechanically and transferred by shuttle car and conveyor to the surface.

Item 1A. Risk Factors

Summary

Investment in our common stock is subject to various risks, including risks and uncertainties inherent in our business. As detailed in the following pages, these risks include, but are not limited to, the following:

- *Risks relating to our industry and the global economy*, such as those associated with declines in coal prices, loss of customers, our ability to obtain financing and other services, competition, decreased demand for coal, customer creditworthiness and global economic disruptions.
- *Risks relating to regulatory and legal developments*, such as those associated with regulatory requirements and costs, healthcare regulations and costs, permit approvals, climate change regulations, social and governance initiatives and regulations, environmental laws and treaties, unfavorable tax actions, decreased demand for energy, environmental cleanup costs and maintenance of internal controls.
- *Risks relating to our operations*, such as those associated with mining and other conditions, many of which are beyond our control, decreased demand for coal, disruptions in transportation services, the availability of skilled workers, higher than estimated employee benefit costs, the availability of coal reserves, equipment availability, equipment breakdown, higher than anticipated property reclamation or mine closure costs, unionization, cybersecurity, artificial intelligence, the complexity of mining in Central Appalachia, our dependence upon third parties and our ability to make capital investments.
- *Risks relating to our liquidity*, such as our ability to obtain or renew surety bonds, our need to maintain capacity for required letters of credit (“LCs”), limitations imposed on us by our revolving credit facility or any future debt instruments and access to funds when needed.
- *Risks relating to the ownership of our common stock*, such as those associated with compliance with securities laws, the availability of an orderly trading market for our common stock, our ability to continue to repurchase common shares, as the Board may determine from time to time, dilution or other effects resulting from the issuance of additional securities, impediments to our acquisition by a third party and limited fora for stockholder litigation matters.

These risks, and others, are reviewed in greater detail below. The realization of any of these risks could cause an investment in our securities to decline and result in a loss. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results.

Risks Relating to Our Industry and the Global Economy

Declines in coal prices would adversely affect our revenues, operating results, cash flows, financial condition, stock price and the value of our coal reserves.

Our results of operations are substantially dependent upon the prices we receive for our coal. Those prices depend upon factors beyond our control (some of which are described in more detail in other risk factors below), including but not limited to:

- the demand for domestic and foreign coal and coke, which depends significantly on the demand for steel;
- the price and availability of natural gas, other alternative fuels and alternative steel production technologies;
- domestic and foreign economic conditions, including economic downturns and the strength of the global and U.S. economies;
- the consumption pattern of industrial customers;
- factors affecting the timely delivery of our products to customers;
- the proximity to and availability, reliability and cost of transportation and port facilities;
- the legal, regulatory and tax environment for our industry and those of our customers;
- the quantity, quality and pricing of coal available in the resale market;
- the effects of emissions control measures;
- adverse weather, climactic or other natural conditions, natural disasters, epidemics, pandemics (such as the COVID-19 virus) and other public health challenges; and
- competition from other suppliers of coal and other energy sources.

A period of sustained low coal prices in the U.S. and other countries would materially adversely affect our operating results and cash flows, as well as the value of our coal reserves, and would cause a number of other risks that we face to increase in likelihood, magnitude and duration.

A period of sustained low demand for coal, particularly for metallurgical coal (or “met coal”), by U.S. and foreign customers and the potential for negative trade impacts resulting from changing tariff policies could reduce the price of our coal, which would reduce our revenues.

Alpha produces coal that is sold directly to both U.S. and foreign customers and indirectly to foreign customers through U.S.-based companies. Coal export revenues accounted for approximately 74% of our coal revenues for the year ended December 31, 2023.

Met coal accounted for approximately 95% of our coal revenues for the year ended December 31, 2023. Any deterioration in conditions in the U.S. or foreign steel industries, including the demand for steel and the continued financial viability of the industry, could reduce the demand for our met coal and could impact the collectability of our accounts receivable from U.S. or foreign steel industry customers.

The demand for foreign-produced steel both in foreign markets and in the U.S. market also depends on factors such as tariff rates on steel. For example, in 2018, the U.S. imposed tariffs on imports of steel mill products and a tariff on imports of wrought and unwrought aluminum. These tariffs led to generally higher rates of steel production in the U.S. and therefore greater domestic demand for met coal. However, Alpha’s export customers include foreign steel producers who may be affected by these and similar tariffs to the extent their imports into the U.S. are curtailed as a result of tariffs. Retaliatory tariffs by foreign nations have already limited international trade and may adversely impact global economic conditions. Additional or augmented tariffs could be imposed following the 2024 U.S. presidential election, which could in turn provoke additional retaliatory tariffs.

In addition, the steel industry’s demand for met 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 and plastics. The U.S. steel industry increasingly relies on processes to make steel that do not use coke, such as electric arc furnaces or pulverized coal processes. As this trend continues, the amount of met coal that we sell and the prices that we receive for it could decrease, thereby reducing our revenues and adversely impacting our earnings and the value of our coal reserves. Lower demand for met coal in international markets would reduce the amount of met coal that we sell and the prices that we receive for it, thereby reducing our revenues and adversely impacting our earnings and the value of our coal reserves. Foreign government policies related to coal production and consumption could also negatively impact pricing and demand for our products.

Our ability to obtain financing and other services, and the form and degree of these services available to us, may be significantly limited by the lending, investment and similar policies of financial institutions and insurance companies regarding carbon energy producers and the environmental impacts of coal combustion.

Certain financial institutions, including banks and insurance companies, have adopted policies that prevent or limit those institutions from providing financing, insurance, bonding, and other services to entities that produce, generate power from or use fossil fuels. These policies, and others that may be adopted in the future, may limit our ability to obtain financing, insurance, surety bonds, and other services and may have similar effects upon our customers, which may in turn reduce future global demand for coal. Further, some investors and investment advisors support divestiture of securities issued by companies, such as us, involved in the fossil fuel extraction market. These developments may negatively affect the market for our securities, our access to capital and financial markets and our ability to obtain insurance in the future, which may in turn have significant negative effects on our business, financial condition and results of operations.

The concurrent loss of, or significant reduction in, purchases by several of our largest customers could materially and adversely affect our revenues and profitability.

Coal sales to our largest customer during the year ended December 31, 2023 accounted for approximately 13% of our total revenues, and coal sales to our 10 largest customers accounted for approximately 74% of our total revenues. These customers could decide to discontinue purchasing coal from us in the volumes that they have previously purchased or decide not to purchase coal from us at all. If several of these customers were concurrently and significantly to reduce their purchases of coal, or if we were unable to sell coal to them on terms as favorable to us as previous sales, we could face a significant reduction in sales while we attempt to sell the coal to other customers in the global marketplace. If such concurrent loss of large customers

or a significant reduction in our sales volume to such customers were to happen, our revenues and profitability could be materially and adversely affected.

Competition within the coal industry may adversely affect our ability to sell coal, and excess production capacity in the industry could put downward pressure on coal prices.

We compete with numerous other coal producers in various regions of the U.S. for domestic and international sales. We also compete in international markets against coal producers in other countries. International demand for U.S. coal exports also affects coal demand in the U.S. This competition affects domestic and international coal prices and our ability to retain or attract coal customers. The threat of increased production from competing mines and natural gas price declines with large basis differentials have all historically contributed, and may in the future contribute, to lower coal prices.

In the past, high demand for coal and attractive pricing brought new investors to the coal industry, leading to the development of new mines and added production capacity. Subsequent overcapacity in the industry contributed, and may in the future contribute, to lower coal prices.

Potential changes to international trade agreements, trade concessions, foreign currency fluctuations or other political and economic arrangements may benefit coal producers operating in countries other than the United States. Additionally, North American steel producers face competition from foreign steel producers, which could adversely impact the financial condition and business of our customers. We cannot provide assurance that we will be able to compete on the basis of price or other factors with companies that in the future may benefit from favorable foreign trade policies or other arrangements.

Coal is priced 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 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. See "Item 1. Business—Competition." Similarly, currency fluctuations could adversely affect demand for U.S. steel.

Downturns and disruptions in the global economy and financial markets have had, and could in the future have, a material adverse effect on the demand for and price of coal, which could have a material negative effect on our sales, costs, margins and profitability and ability to obtain financing.

Downturns and disruptions in the global economy and financial markets have from time to time resulted in, among other things, extreme volatility in securities prices, severely diminished liquidity and credit availability, rating downgrades of certain investments and declining valuations of others, including real estate. Significant economic disruptions can result from numerous unpredictable factors, including but not limited to market forces, natural disasters, pandemics, trade disputes and armed conflicts. For example:

- During the COVID-19 pandemic, global supply chain disruptions, including COVID-19-related factory closures and port congestion reduced our ability to obtain some materials used in our operations, reduced the demand for steel, and therefore for met coal, and affected railroad and other transportation systems.
- The Chinese government has from time to time implemented regulations and promulgated new laws or restrictions on its domestic coal industry, sometimes with little advance notice, which may affect worldwide coal demand, supply and prices.
- Although we do not have assets in the Middle East, we do have customers in the region, and if the scope of the ongoing conflicts in that region were to expand materially, the international transport of some goods could become more difficult, even to certain areas outside the Middle East, and shipping costs could increase substantially.

Future disruptions of this sort, and in particular the tightening of credit in financial markets or any other disruption that negatively affects global economic growth, could adversely affect our customers' ability to obtain financing for operations and result in a decrease in demand, lower coal prices, the cancellation of some orders for our coal and the restructuring of agreements with some of our customers. Changes in the value of the U.S. dollar relative to other currencies, particularly where imported products are required for the mining process, could result in materially increased operating expenses. Any prolonged global, national or regional economic recession or other similar events could have a material adverse effect on the demand for and price of coal, on our sales, margins and profitability, and on our own ability to obtain financing.

We are unable to predict the timing, duration and severity of any potential future disruptions in financial markets and potential future adverse economic conditions in the U.S. and other countries and the impact these events may have on our operations and the industry in general.

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.

The ongoing military conflict between Russia and Ukraine has resulted in substantial sanctions upon Russia and certain supply and market disruptions, particularly in energy markets. Many governments have banned imports from Russia, including commodities such as oil, natural gas and coal. These events have caused volatility in the aforementioned commodity markets. Although we have not experienced any material adverse effect on its results of operations, financial condition or cash flows as a result of the war 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 customers, like natural gas.

This conflict may cause additional, severe adverse effects in the region and for international markets. Resulting disruptions could reduce demand for steel made through the use of metallurgical coal and coal-fired electricity, 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.

Our ability to collect payments from our customers could be impaired if their creditworthiness and financial health deteriorate.

Our ability to receive payment for coal sold and delivered depends on the continued creditworthiness and financial health of our customers. Competition with other coal suppliers could force us to extend credit to customers and on terms that could increase the risk we bear on payment default. In recent years, downturns in the economy and disruptions in the global financial markets have, from time to time, affected the creditworthiness of our customers and limited their liquidity and credit availability. In addition, purchasers of our met coal may increasingly be required to implement costly new emissions and other technologies, thereby increasing the risk we bear for customer payment default.

For the year ended December 31, 2023 we derived 74% of our coal revenues from coal sales made to customers outside the U.S. Our customers in other countries may be subject to other pressures and uncertainties that may also affect their ability to pay, including trade barriers, exchange controls and local economic conditions, threat of military action, and political conditions.

Continuing low demand for thermal coal, or further declines in demand, by North American electric power generators could reduce the price of our thermal coal, which would reduce our revenues.

Thermal coal accounted for approximately 5% of our coal revenues for the year ended December 31, 2023. The majority of our sales of thermal coal were to U.S. electric power generators. The North American demand for thermal coal is affected primarily by the overall demand for electricity, the availability, quality and price of competing fuels, such as natural gas, nuclear fuel, oil and alternative energy sources such as wind, solar, and hydroelectric power, increasingly stringent environmental and other governmental regulations and the coal inventories of utilities.

A reduction in the amount of coal consumed by North American electric power generators would reduce the amount of thermal coal that we sell and the price that we receive for it, thereby reducing our revenues and adversely impacting our earnings and the value of our coal reserves. In addition, uncertainty caused by federal and state regulations could cause thermal coal customers to be uncertain of their coal requirements in future years, which could adversely affect our ability to sell coal to such customers under multi-year sales contracts.

Risks Relating to Regulatory and Legal Developments

The increasingly stringent regulation of the mining industry imposes significant costs on us, and future regulations or violations could increase those costs or limit our ability to produce coal.

Our operations are subject to a wide variety of federal, state and local environmental, health and safety, transportation, labor and other laws and regulations relating to matters such as:

- blasting;
- controls on emissions and discharges;
- the effects of operations on surface water and groundwater quality and availability;
- the storage, treatment and disposal of wastes and the authorizations necessary to create new waste management facilities;
- the remediation of contaminated soil, surface water and groundwater;
- surface subsidence from underground mining;
- the classification of plant and animal species near our mines as endangered or threatened species;
- the reclamation of mined sites; and
- employee health and safety, and benefits for current and former employees (described in more detail below).

These laws and regulations are becoming increasingly stringent. For example:

- federal and state agencies and citizen groups have increasingly focused on the amount of selenium and other constituents in mine-related water discharges;
- The U.S. Mine Safety and Health Administration (“MSHA”) and the states of Virginia and West Virginia have implemented and proposed changes to mine safety and health requirements to impose more stringent health and safety controls, enhance mine inspection and enforcement practices, increase sanctions, and expand monitoring and reporting; and
- Greenhouse gas (“GHG”) emissions reductions are being considered that could increase our costs, require additional controls, or compel us to limit our current operations.

In addition, these laws and regulations require us to obtain numerous governmental permits and comply with the requirements of those permits, which are described in more detail below.

We incur substantial costs to comply with the laws, regulations and permits that apply to our mining and other operations and to address the outcome of inspections. The required compliance and actions to address inspection outcomes are often time consuming and costly and may delay commencement or continuation of exploration or production. In addition, due in part to the extensive and comprehensive regulatory requirements, violations of laws, regulations and permits occur at our operations from time to time and may result in significant costs to us to correct the violations, as well as substantial civil or criminal penalties and limitations or shutdowns of our operations. In particular, President Biden’s administration has expressed support for policies that may result in stricter environmental, health and safety standards applicable to our operations and those of our customers. See “Item 1. Business—Environmental and Other Regulatory Matters—Clean Water Act—Wastewater Discharge.”

MSHA and state regulators may also order the temporary or permanent closing of a mine in the event of certain violations of safety rules, accidents or imminent dangers. In addition, regulators may order changes to mine plans or operations due to their interpretation or application of existing or new laws or regulations. Any required changes to mine plans or operations may result in temporary idling of production or addition of costs.

These factors have had and will continue to have a significant effect on our costs of production and competitive position and, as a result, on our results of operations, cash flows and financial condition. New laws and regulations, as well as future interpretations or different enforcement of existing laws and regulations, may have a similar or more significant impact on us, including delays, interruptions or a termination of operations.

Increasing attention to environmental, social and governance (ESG) matters may negatively affect our business and financial results.

Increasing attention has been given to corporate activities related to ESG matters in public discourse and the investment community. A number of advocacy groups, both domestically and internationally, have campaigned for governmental and private action to promote ESG-related change at public companies, including, but not limited to, through the investment and voting practices of investment advisers, pension funds, universities and other members of the investing community. These activities have also aimed to increase the attention on and demand for action related to various ESG matters, which has contributed to increasing societal, investor, and legislative focus and pressure on ESG practices and disclosures, including those related to climate change, GHG emissions targets, business resilience under the assumptions of demand-constrained scenarios, net-zero ambitions, transition plans, actions related to diversity and inclusion, political activities, racial equity audits, and governance standards. As a result, we may face increasing pressure regarding our ESG practices and disclosures, which could in turn result in the cancellation or delay of projects, the revocation or delay of permits, termination of contracts, lawsuits, regulatory action, and policy change that may adversely affect our business strategy, increase our costs, and adversely affect our reputation and financial performance.

These developments could result in the implementation of certain ESG practices and/or disclosure requirements that present heightened legal, regulatory and reputational risks for us, and complying with these requirements may be costly and time-consuming.

Climate change or carbon dioxide emissions reduction initiatives could significantly reduce the demand for coal and reduce the value of our coal assets.

Global climate issues continue to attract considerable public and scientific attention. Numerous reports have expressed concern about the impacts of human activity, and in particular the emissions of GHG, such as carbon dioxide and methane, on global climate issues. Combustion of fossil fuels like coal results in the creation of carbon dioxide, which is emitted into the atmosphere by coal end users such as coal-fired electric power generators, coke plants and steelmaking plants, and, to a lesser extent, by the combustion of fossil fuels by the mining equipment we use. In addition, coal mining can release methane from the mine, directly into the atmosphere. Concerns associated with global climate change, and GHG emissions reduction initiatives designed to address them, have resulted, and are expected to continue to result, in materially increased operating costs for steel producers who use met coal, particularly in Europe.

Emissions from coal consumption and production are subject to pending and proposed regulations as part of regulatory initiatives to address global climate change and global warming. Various international, federal, regional, foreign and state proposals are currently in place or being considered to limit emissions of GHGs, including possible future U.S. treaty commitments, new federal or state legislation, and regulation under existing environmental laws by the EPA and other regulatory agencies and litigation by private parties. These include:

- the 2015 Paris climate summit agreement, which resulted in voluntary commitments by 197 countries to reduce their GHG emissions and could result in additional firm commitments by various nations and states with respect to future GHG emissions. On June 1, 2017, the Trump administration announced that the U.S. would withdraw from the agreement, however, on February 19, 2021, the U.S. formally rejoined the Paris Agreement;
- the EPA's regulations to reduce the transport of nitrogen oxide and ozone on prevailing winds from the Midwest and South U.S. to states in the Northeast;
- proposed EPA regulations to increase the stringency of the National Ambient Air Quality Standards for particulate matter emissions;
- the EPA's February 2024 regulations increasing the stringency of the National Ambient Air Quality Standards for the primary (health-based) annual standard for PM_{2.5};
- state and regional climate change initiatives implementing renewable portfolio standards or cap-and-trade schemes;
- challenges to or denials of permits for new coal-fired power plants or retrofits to existing plants by state regulators and environmental organizations due to concerns related to GHG emissions from the new or existing plants;
- private litigation against coal companies or power plant operators based on GHG-related concerns;
- the Glasgow Climate Pact resulting from the 2021 United Nations Climate Change Conference (COP26) held from October 31 to November 13, 2021, which, though not legally binding, contains a plan to reduce use of coal by 40%; and
- the agreement of the participating countries at the 2023 COP28 conference to call on governments worldwide to speed up the transition away from fossil fuels to renewables such as wind and solar power.

On August 3, 2015, the EPA released a final rule establishing the Power Plant NSPS. The final rule requires that newly constructed fossil fuel-fired steam generating units achieve an emission standard for carbon dioxide of 1,400 lb CO₂/MWh-gross. The standard is based on the performance of a supercritical pulverized coal boiler implementing partial CCS. Modified and reconstructed fossil fuel fired steam generating units must implement the most efficient generation achievable through a combination of best operating practices and equipment upgrades, to meet an emission standard consistent with best historical performance.

In addition, on July 8, 2019, the EPA published the ACE Rule, a replacement of the CPP. In contrast to the CPP, which called for the shifting of electricity generation away from coal-fired sources towards natural gas and renewables, the ACE Rule focuses on reducing GHG emissions from existing coal-fired plants by requiring states to mandate the implementation of a range of technologies at power plants designed to improve their heat rate (i.e., decrease the amount of fuel necessary to generate the same amount of electricity). However, on January 19, 2021, the Court of Appeals of the District of Columbia struck down the ACE rule. The EPA has since announced an intent to consider new regulations governing carbon emissions from existing power plants. The EPA's draft strategic plan issued in November 2021 emphasizes climate change and environmental justice as its top two priorities. More stringent standards for carbon dioxide pollution as a result of these rulemakings could further reduce demand for coal, and our business would be adversely impacted. In addition, certain banks and other financing sources have

taken actions to limit available financing for the development of new coal-fueled power plants, which also may adversely impact the future global demand for coal.

Furthermore, several well-funded non-governmental organizations have explicitly undertaken campaigns to minimize or eliminate the use of coal as a source of electricity generation. These efforts, as well as concerted conservation and efficiency efforts that result in reduced electricity consumption and consumer and corporate preferences for non-coal fuel sources, could cause coal prices and sales of our coal to materially decline and could cause our costs to increase.

Any future laws, regulations or other policies or initiatives of the nature described above may adversely impact our business in material ways. The degree to which any particular law, regulation or policy impacts us will depend on several factors, including the substantive terms involved, the relevant time periods for enactment and any related transition periods. Considerable uncertainty is associated with these regulatory initiatives and legal developments, as the content of proposed legislation and regulation is not yet fully determined and many of the new regulatory initiatives remain subject to governmental and judicial review. In particular, President Biden's administration has expressed support for the regulation of GHG emissions. In prior Congressional sessions, legislative proposals regulating GHG emissions (such as the Green New Deal) have been introduced, and Congressional leadership may introduce similar legislation this Congressional term. We routinely attempt to evaluate the potential impact on us of any proposed laws, regulations or policies, which requires that we make certain material assumptions. From time to time, we may determine that the impact of one or more such laws, regulations or policies, if adopted and ultimately implemented as proposed, may result in materially adverse impacts on our operations, financial condition or cash flow; however, we often are not able to reasonably quantify such impacts.

In general, any laws, regulations or other policies aimed at reducing GHG emissions have imposed, and are likely to continue to impose, significant costs on many coal-fired power plants, steel-making plants and industrial boilers, which may make them unprofitable. Accordingly, some existing power generators have switched to other fuels that generate fewer emissions and others are likely to switch, some power plants have closed and others are likely to close, and fewer new coal-fired plants are being constructed, all of which reduce demand for coal and the amount of coal that we sell and the prices that we receive for it, thereby reducing our revenues and adversely impacting our earnings and the value of our coal reserves.

Other extensive environmental laws, including existing and potential future legislation, treaties and regulatory requirements relating to air emissions, waste management and water discharges, affect our customers and could further reduce the demand for coal as a fuel source and cause prices and sales of our coal to materially decline.

Our customers' operations are subject to extensive laws and regulations relating to environmental matters, including air emissions, wastewater discharges and the storage, treatment and disposal of wastes and operational permits. In particular, the Clean Air Act and similar state and local laws extensively regulate the amount of sulfur dioxide, particulate matter, nitrogen oxides, mercury and other compounds emitted into the air from fossil fuel fired power plants, which are the largest end-users of our thermal coal. A series of more stringent requirements will or may become effective in coming years, including:

- implementation of the current and more stringent proposed ambient air quality standards for sulfur dioxide, nitrogen oxides, particulate matter and ozone, including the EPA's issuance of NAAQS in October 2015 of a more stringent ambient air quality standard for ozone and the EPA's determinations of attainment designations with respect to these rules;
- implementation of the EPA's February 2024 revised primary (health-based) annual standard for PM_{2.5}, from 12.0 µg/m³ to 9.0 µg/m³;
- implementation of the EPA's Revised CSAPR to significantly reduce nitrogen oxide and sulfur dioxide emissions from power plants in 12 states in the eastern United States;
- continued implementation of the EPA's MATS, which impose stringent limits on emissions of mercury and other toxic air pollutants from electric power generators, issued in December 2011 and in effect pending completion of judicial review proceedings;
- the EPA's Good Neighbor Plan rules, which secured significant reductions in ozone-forming emissions of nitrogen oxides (NO_x) from power plants and industrial facilities in 23 states;
- multiple and inconsistent future GHG emission reporting obligations imposed in federal and state laws;
- the exposure of workers to silica dust;
- implementation of the EPA's August 2014 final rule on cooling water intake structures for power plants;
- more stringent EPA requirements governing management and disposal of coal ash pursuant to a rule finalized in December 2014 and new amendments effective as of August 2018;
- implementation of the COE/EPA final rule revising and reissuing Nationwide Permits under Section 404 of the Clean Water Act and applying the conforming rule Revised Definition of Waters of the United States; and

- implementation of the EPA's November 2015 final rule setting effluent discharge limits on the levels of metals that can be discharged from power plants.

These environmental laws and regulations impose significant costs on our customers, which are increasing as these requirements become more stringent. These costs make coal more expensive to use and make it a less attractive fuel source of energy for our customers. Accordingly, some existing power generators have switched to other fuels that generate fewer emissions and others are likely to switch, some power plants have closed and others are likely to close, and no coal-fired plants are currently being constructed in the U.S., all of which reduce demand for coal, the amount of coal that we sell and the prices that we receive for it, thereby reducing our revenues and adversely impacting our earnings and the value of our coal reserves.

In addition, regulations regarding sulfur dioxide emissions under the Clean Air Act, including caps on emissions and the price of emissions allowances, have a potentially significant impact on the demand for our coal based on its sulfur content. We sell both higher sulfur and low sulfur coal. More widespread installation by power generators of technology that reduces sulfur emissions may make high sulfur coal more competitive with our low sulfur coal. Decreases in the price of emissions allowances could have a similar effect. Significant increases in the price of emissions allowances could reduce the competitiveness of higher sulfur coal compared to low sulfur coal and possibly natural gas at power plants not equipped to reduce sulfur dioxide emissions. Any of these consequences could result in a decrease in revenues from some of our operations, which could adversely affect our business and results of operations.

We may be unable to obtain and renew permits, mine plan modifications and approvals, leases or other rights necessary for our operations, which would reduce our production, cash flows and profitability.

Mining companies must obtain numerous regulatory permits that impose strict conditions on various environmental and safety matters in connection with coal mining. The permitting rules are complex and change over time, potentially in ways that may make our ability to comply with the applicable requirements more difficult or impractical or even preclude the continuation of ongoing operations or the development of future mining operations. Further, regulatory agencies responsible for the review and approval of these permits may not do so in a timely fashion due to lack of resources or other factors. The public, including special interest groups and individuals, have certain rights under various statutes to comment upon, submit objections to and otherwise engage in the permitting process, including bringing citizens' lawsuits or administrative actions to challenge permits or mining activities. In the states where we operate, applicable laws and regulations also provide that a mining permit or modification can, under certain circumstances, be delayed, refused or revoked if we or any entity that owns or controls or is under common ownership or control with us or is determined to be linked to us under OSM's AVS, have unabated permit violations or have been the subject of permit or reclamation bond revocation or suspension. These regulations define certain relationships, such as owning over 50% of stock in an entity or having the authority to determine the manner in which the entity conducts mining operations, as constituting ownership and control. Certain other relationships are presumed to constitute ownership or control, including being an officer or director of an entity or owning between 10% and 50% of the mining operator. This presumption, in some cases, can be rebutted where the person or entity can demonstrate that it in fact does not or did not have authority directly or indirectly to determine the manner in which the relevant coal mining operation is conducted. Thus, past or ongoing violations of federal and state mining laws by us or by coal mining operations owned or controlled by our significant stockholders, directors or officers or by entities linked to us through OSM's AVS could provide a basis to revoke existing permits and to deny the issuance of additional permits or modification or amendment of existing permits. This is known as being "permit-blocked." In recent years, the permitting required for coal mining has been the subject of increasingly stringent regulatory and administrative requirements and extensive litigation by environmental groups.

As a result, the permitting process is costly and time-consuming, required permits may not be issued or renewed in a timely fashion (or at all), and permits that are issued may be conditioned in a manner that may restrict our ability to conduct our mining activities efficiently. In some circumstances, regulators could seek to revoke permits previously issued. We are required under certain permits to provide data on the impact on the environment of proposed exploration for or production of coal to governmental authorities.

In particular, certain of our activities require a dredge and fill permit from the COE under Section 404 of the CWA. In recent years, the Section 404 permitting process has been subject to increasingly stringent regulatory and administrative requirements and a series of court challenges, which have resulted in increased costs and delays in the permitting process.

Additionally, we may rely on nationwide permits under the CWA Section 404 program for some of our operations. These nationwide permits are issued every five years, and the 2021 nationwide permit program was reissued in 2021. If we are unable to use the nationwide permits and require an individual permit for certain work, that could delay operations.

Many of our permits are subject to renewal from time to time, and renewed permits may contain more restrictive conditions than our existing permits. For example, many of our permits governing surface stream and groundwater discharges and impacts will be subject to new and more stringent conditions to address various new water quality requirements upon renewal over the next several years. Although we have no estimates at this time, our costs to satisfy these conditions could be substantial.

Future changes or challenges to the permitting and mine plan modification and approval process could cause additional increases in the costs, time, and difficulty associated with obtaining and complying with the permits and could delay or prevent commencing or continuing exploration or production operations and, as a result, adversely affect our coal production, cash flows and profitability.

Recent actions by the EPA, including the Good Neighbor Plan, the EPA's February 2024 revision of the primary (health-based) annual standard for PM_{2.5}, from 12.0 µg/m³ to 9.0 µg/m³, the proposed rule for more stringent emission standards for particulate matter emissions, and the proposed MATS rule to regulate emissions of mercury and other metals, fine particulates, and acid gases such as hydrogen chloride from coal- and oil-fired power plants, referred to as "MATS," may make it more difficult for our customers to continue to use our coal in their operations.

Proposed SEC GHG reporting rules, if finalized and upheld by the courts, could potentially act as a deterrent to the use of our coal due to pressure from customers, shareholders and/or the media. California's enactment of its own GHG reporting laws in October 2023 also suggests the possibility of inconsistent and/or duplicative future GHG reporting requirements, which would likely add to our operating costs.

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

Our operations use certain hazardous materials, and, from time to time, we generate limited quantities of hazardous wastes. We may be subject to claims under federal or state law for toxic torts, natural resource damages and other damages as well as for the investigation and clean-up of soil, surface water, sediments, groundwater and other natural resources. Such claims may arise out of current or former conditions at sites that we own or operate, or formerly owned or operated, and at contaminated sites owned or operated by third parties to which we sent wastes for treatment, storage or disposal. Our liability for such claims may be joint and several, so that we may be held responsible for more than our share of the contamination or other damages, or even for the entire share.

We operate and maintain a number of coal slurry impoundments. These impoundments are subject to extensive regulation. Some slurry impoundments maintained by other coal mining operations have failed, causing extensive damage to the environment and natural resources, as well as liability for related personal injuries and property damages. Some of our impoundments overlie mined out areas, which can pose a heightened risk of failure and of resulting damages. If one of our impoundments were to fail, we could be subject to substantial claims for the resulting environmental contamination and associated liability, as well as for fines and penalties, and potential third-party claims for personal injury, property damage or other losses. In addition, we may become subject to such claims related to surface expressions of methane gas, which can result from underground coal mining activities.

These and other environmental impacts that our operations may have, as well as exposures to hazardous substances or wastes associated with our operations, could result in costs and liabilities that could render continued operations at certain mines economically unfeasible or impractical or otherwise materially and adversely affect our financial condition and results of operations.

Decreases in consumer demand for electricity and changes in general energy consumption patterns attributable to energy conservation trends could adversely affect our business, financial condition and results of operations.

Due to efforts to promote energy conservation in recent years, there is a risk that both the demand for electricity and the general energy consumption patterns of consumers worldwide will decrease. The ability of energy conservation technologies, public initiatives and government incentives to reduce electricity consumption or to support other forms of renewable energy could also lead to a reduction in the demand for and the price of coal. If prices for coal are not competitive, our business, financial condition and results of operations may be materially harmed.

Our systems and procedures for internal control over financial reporting or the disclosure controls related to them may in the future have material weaknesses, which may adversely affect the value of our common stock.

We are responsible for maintaining systems and documentation necessary to evaluate the effectiveness of our internal control over financial reporting. These activities may divert management's attention from other business concerns. To maintain and improve our controls and procedures, we must commit significant resources, may be required to hire additional staff and need to continue to provide effective management oversight, which could have a material adverse effect on our business, financial condition, results of operations and cash flows.

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

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

Certain U.S. federal income tax provisions currently available with respect to coal percentage depletion and exploration and development may be eliminated by future legislation.

From time to time, legislation is proposed that could result in the reduction or elimination of certain U.S. federal income tax provisions currently available to companies engaged in the exploration, development, and production of coal reserves. These proposals have included, but are not limited to: (1) the elimination of current deductions, the 60-month amortization period and the 10-year amortization period for exploration and development costs relating to coal and other hard mineral fossil fuels, (2) the repeal of the percentage depletion allowance with respect to coal properties and (3) the repeal of capital gains treatment of coal and lignite royalties. The passage of these or other similar proposals could increase our taxable income and negatively impact our cash flows and the value of an investment in our common stock.

Changes in tax laws, in the areas of both income taxes and non-income taxes, may materially affect our results of operations and could cause our financial position and profitability to deteriorate.

We pay non-income taxes on the coal we produce. A substantial portion of our non-income taxes are levied as a percentage of gross revenues, while others are levied on a per ton basis. If such liabilities were to arise, or if non-income tax rates were to increase significantly, our results of operations could be materially and adversely affected.

Further, changes in tax laws may materially affect our results of operations and could cause our financial position and profitability to deteriorate. On August 16, 2022, the Inflation Reduction Act of 2022 ("IRA") was signed into law. Among other provisions, the IRA enacted a 15% corporate alternative minimum tax and a 1% excise tax on repurchases of corporate stock for tax years beginning after December 31, 2022. As of December 31, 2023, we have accrued a stock repurchase excise tax of \$4.7 million related to our share repurchase program, which is recorded in treasury stock at cost. Our income is taxable in the U.S., with a significant portion qualifying for preferential treatment as foreign-derived intangible income ("FDII"). If U.S. tax rates increase or the FDII deduction is eliminated or reduced, both of which have been proposed by the current U.S. presidential administration, our provision for income taxes, results of operations, net income, and cash flows would be adversely affected. Also, if our customers move manufacturing operations to the U.S., our FDII deduction may be reduced. Beginning in 2026, the FDII deduction will be reduced from 37.5% to 21.875% of FDII.

Risks Relating to Our Operations

Our coal mining production and delivery is subject to conditions and events, many of which are beyond our control, that could result in higher operating expenses and decreased production and sales. The occurrence of a significant accident or other event that is not fully insured could adversely affect our business and operating results and could result in impairments to our assets.

Our coal production at our mines is subject to operating conditions and events, many of which are beyond our control, that could disrupt operations, affect production and the cost of mining for varying lengths of time and have a significant impact on our operating results. Adverse operating conditions and events that we have experienced in the past and/or may experience in the future include:

- changes or variations in geologic, hydrologic or other conditions, such as the thickness of the coal deposits and the amount of rock, clay or other non-coal material embedded in or overlying the coal deposit;
- mining, processing and loading equipment failures and unexpected maintenance problems;
- limited availability or increased costs of mining, processing and loading equipment and parts and other materials from suppliers;
- difficulties associated with mining under or around surface obstacles;
- unfavorable conditions with respect to proximity to and availability, reliability and cost of transportation facilities;
- adverse weather and natural disasters, such as heavy snows, heavy rains and flooding, lightning strikes, hurricanes or earthquakes;
- accidental mine water discharges, coal slurry releases and failures of an impoundment or refuse area, including inadvertent environmental impacts to the local community;
- mine safety accidents, including fires and explosions from methane and other sources;
- hazards or occurrences that could result in personal injury and loss of life;
- a shortage of skilled and unskilled labor;
- security breaches, cyber attacks or terroristic acts;
- strikes and other labor-related interruptions;
- delays or difficulties in, the unavailability of, or unexpected increases in the cost of acquiring, developing or permitting new acquisitions from the federal government and other new mining reserves and surface rights;
- competition and/or conflicts with other natural resource extraction activities and production within our operating areas;
- the termination of material contracts by state or other governmental authorities; and
- fatalities, personal injuries or property damage arising from train derailments, mined material or overburden leaving permit boundaries, underground mine blowouts, impoundment failures, subsidence or other unexpected incidents.

If any of these or other conditions or events occur in the future at any of our mines or affect deliveries of our coal to customers, they may increase our cost of mining, delay or halt production or sales to our customers, result in regulatory action or lead to customers initiating claims against us. Any of these consequences could adversely affect our operating results or result in impairments to our assets.

In addition, our mining operations are concentrated in a small number of material mines. As a result, the effects of any of these conditions or events may be exacerbated and may have a disproportionate impact on our results of operations and assets.

We maintain insurance policies that provide limited coverage for some, but not all, of these risks. Even where covered by insurance, these risks may not be fully covered, and insurers may contest their obligations to make payments. Failures by insurers to make payments could have a material adverse effect on our cash flows, results of operations or financial condition.

Disruptions in transportation services or port facilities, and increased transportation costs, could impair our ability to supply coal to our customers, reduce demand and adversely affect our business.

For the year ended December 31, 2023, 89% of our coal volume was transported from our shipping points to a vessel loading point or customer location by rail. Deterioration in the reliability of the service provided by rail carriers because of, for example, insufficient allocation of resources to us by rail companies or a strike by railroad workers, would result in increased internal coal handling costs and decreased shipping volumes. If we were unable to find alternatives, our business would be adversely affected, possibly materially. Most of our operations are serviced by a single rail carrier. Due to the difficulty in arranging alternative transportation, these operations are particularly at risk of disruptions, capacity issues or other difficulties with that carrier's transportation services, which could adversely and materially affect our revenues and results of operations.

Further, we depend significantly upon the reliable operation of the DTA coal export terminal in Newport News, Virginia. DTA, in which we hold a 65.0% ownership interest, provides us with the ability to fulfill a broad range of customer coal quality requirements through coal blending, while also providing storage capacity and transportation flexibility. Any significant disruption in DTA's functions and operations or other limitations upon the capacity of DTA or other transportation facilities could adversely and materially affect our revenues and results of operations.

We also depend upon trucks, barges and ocean vessels to deliver coal to our customers. In addition, much of our coal is transported from our mines to our loading facilities by trucks owned and operated by third parties. Disruption of any of these transportation services due to weather-related problems, mechanical difficulties, fuel and supply costs, strikes, lockouts, bottlenecks, accidents, terrorist attacks or other events could impair our ability to supply coal to our customers, resulting in decreased shipments and revenue. Disruption in shipment levels over long periods of time could cause our customers to look to other sources for their coal needs, negatively affecting our revenues and results of operations.

An increase in transportation costs could have an adverse effect on our ability to increase or to maintain production on a profit-making basis and could therefore adversely affect our revenues and earnings. Because transportation costs represent a significant portion of the total cost of coal for our customers, increases in transportation costs could also reduce overall demand for coal or make our coal production less competitive than coal produced from other sources or other regions.

Expenditures for certain employee benefits could be materially higher than we have anticipated, which could increase our costs and adversely affect our financial results. Litigation regarding employee compensation could have a material adverse effect upon our liquidity and results of operations.

We are responsible for certain liabilities under a variety of benefit plans and other arrangements with employees. The unfunded status of these obligations as of December 31, 2023 included \$63.2 million of workers' compensation obligations, net of expected insurance receivable amounts, \$101.9 million of pension obligations and \$107.3 million of black lung obligations. These obligations have been estimated based on assumptions including actuarial estimates, discount rates, and changes in health care costs. We could be required to expend greater amounts than anticipated. In addition, future regulatory and accounting changes relating to these benefits could result in increased obligations or additional costs, which could also have a material adverse effect on our financial results. Several states in which we operate consider changes in workers' compensation laws from time to time, which, if enacted, could adversely affect us. In addition, the U.S. Department of Labor has a legislative directive to periodically review operators' financial standing and federal black lung liabilities, which could result in a substantial increase in required security, negatively impacting liquidity. The Department of Labor has proposed for public comment new regulations which, if adopted, would substantially increase the collateral required to secure self-insured federal black lung obligations. Under the proposed 120% minimum collateral requirement, we estimate we could be required to provide approximately \$80.0 million to \$100.0 million of collateral to secure certain of our black lung obligations. A significant increase in these collateral obligations would have a materially adverse effect on our liquidity.

We are party to litigation that has been initiated against certain of our subsidiaries in which the plaintiffs allege violations of the Fair Labor Standards Act due to alleged failure to compensate for time "donning" and "doffing" equipment and to account for the effects in the calculation of overtime rates and pay. The plaintiffs seek collective action certification. We cannot reasonably estimate a range of potential exposure at this time. We believe the plaintiffs' claims are without merit, but if we were ultimately unsuccessful in defending against this litigation, it could have a material, adverse effect upon our liquidity and results of operations.

We require a skilled workforce and a dedicated senior management team to run our business. If we cannot hire and retain qualified persons, including to meet replacement or expansion needs, we may not be able to achieve planned results.

Efficient coal mining using modern techniques and equipment requires skilled laborers with mining experience and proficiency as well as qualified managers, supervisors and other staff. We, along with the mining industry generally, are currently facing a significant shortage of operating staff. Moreover, we are seeing an increasing number of those who leave our employment accept new positions outside the coal industry, further reducing the number of skilled employees available to us and leading to increased labor costs. When coal producers compete for skilled miners, recruiting becomes more difficult, and employee turnover rates typically increase, each of which negatively affect operating efficiency and costs. If we are unable to train or retain the necessary number of staff, it could adversely affect our productivity, costs and ability to maintain or expand production.

In addition, we depend on the experience and industry knowledge of our officers and other key employees to design and execute our business plans. If we experience a substantial turnover in our leadership and other key employees, and those persons are not replaced by individuals with comparable skills, our performance could be materially adversely impacted. Furthermore, we may be unable to attract and retain additional qualified executives as needed in the future. We believe that our future success will depend on our continued ability to attract and retain highly skilled and qualified personnel. There is a high level of competition for experienced, successful personnel in our industry. Our inability to meet our executive staffing requirements in the future could impair our growth and harm our business.

Cybersecurity attacks, natural disasters, terrorist attacks and other similar crises or disruptions may negatively affect our business, financial condition and results of operations, or those of our customers and suppliers.

Our business, or the businesses of our customers and suppliers, may be impacted by disruptions such as terrorist or cybersecurity attacks or failures, threats to physical security, and extreme weather conditions or other natural disasters. These disruptions or any significant increases in energy prices that follow could result in government-imposed price controls. Our insurance, or the insurance of third-party service providers, may not protect us against such occurrences. It is possible that any

of these occurrences, or a combination of them, could have a material adverse effect on our business, financial condition and results of operations.

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, analyze seismic and drilling information, estimate quantities of met coal reserves, as well as other activities related to our businesses. We own and operate some of these systems and applications while others are owned and operated by our third-party service providers. In the ordinary course of business, we and our service providers collect, process, transmit and store data, such as proprietary business information and personally identifiable information.

Our IT systems and those of third parties, including third-party service providers, are vulnerable to malicious and intentional cyberattacks involving ransomware, malware and viruses, accidental or inadvertent incidents, the exploitation of security vulnerabilities or “bugs” in software or hardware, among other scenarios. Both the frequency and magnitude of cyberattacks are expected to increase, and attackers are becoming more sophisticated, particularly given the increasing availability and sophistication of “artificial intelligence” systems. Further, security vulnerabilities may be introduced from the use of artificial intelligence by us, our customers or third parties. The development of quantum computing technology, if successful, may also eventually pose very significant encryption and other data security risks. Geopolitical tensions or conflicts, such as Russia’s invasion of Ukraine, conflicts in the Middle East or increased tension with China, may also create a heightened risk of cybersecurity attacks.

A cyber-attack may involve persons gaining unauthorized access to our digital systems for purposes of gathering, monitoring, releasing, misappropriating or corrupting proprietary or confidential information, or causing operational disruption. Unauthorized physical access to one of our facilities or electronic access to our information systems could result in, among other things, unfavorable publicity and reputational harm, litigation by affected parties, damage to sources of competitive advantage, disruptions to our operations, loss of customers, financial obligations for damages related to the theft or misuse of such information and costs to remediate such security vulnerabilities, any of which could have a substantial impact on our results of operations, financial condition or cash flows. Additionally, we may be unable to anticipate, detect or prevent future attacks, particularly as the methodologies utilized by attackers change frequently or are not recognized until launched, and we may be unable to investigate or remediate incidents because attackers are increasingly using techniques and tools designed to circumvent controls, to avoid detection, and to remove or obfuscate forensic evidence.

Strategic targets, such as energy-related assets, may be at greater risk of future cybersecurity attacks than other targets in the U.S. Our defensive preparedness against cybersecurity attacks includes limited technological capabilities for prevention and detection of cybersecurity disruptions; internal governance processes that assist to identify, protect, and remediate security risks routinely; non-technological measures such as threat information sharing with industry groups; internal training and awareness campaigns including testing of employee awareness and an emphasis on resiliency. If the measures we and our cloud service providers are taking to protect against cybersecurity disruptions prove to be insufficient or if our proprietary data is otherwise not protected, we as well as our customers, employees, or third parties could be adversely affected. Cybersecurity disruptions could cause physical harm to people or the environment; damage or destroy assets; compromise business systems; result in proprietary information being altered, lost, or stolen; result in employee, customer, or third-party information being compromised; or otherwise disrupt our business operations. We could incur significant costs to remedy the effects of a major cybersecurity disruption in addition to costs in connection with resulting regulatory actions, litigation or reputational harm. Further, as cybersecurity attacks 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 cybersecurity attacks.

If the assumptions underlying our accruals for reclamation and mine closure obligations prove to be inaccurate, we could be required to expend greater amounts than anticipated.

SMCRA establishes operational, reclamation and closure standards for all aspects of surface mining as well as deep mining. We accrue for the costs of current mine disturbance and final mine closure, including the cost of treating mine water discharge where necessary. Our estimated total reclamation and mine-closing liabilities were \$205.4 million as of December 31, 2023, based upon permit requirements, the historical experience at our operations and a number of variables involving assumptions and estimates. Total reclamation and mine-closing liabilities are, therefore, subject to change due to a variety of factors, including estimates of future asset retirement costs and the timing of these costs, estimates of proven reserves, assumptions involving profit margins of third-party contractors, inflation rates and discount rates. Our future operating results and financial position could be materially adversely affected by these factors. In addition, significant changes from period to period could result in significant variability in our operating results, which could reduce comparability between periods and impact our liquidity. See “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates” for a description of our estimated costs of these liabilities.

Decreased availability or increased costs of key equipment and materials, including certain items mandated by regulations, increased commodities costs, sustained inflation or increased costs of coal that we purchase from third parties, could increase our cost of production and decrease our profitability.

We depend on reliable supplies of mining equipment, replacement parts and materials such as explosives, diesel fuel, tires, steel, magnetite and other raw materials and consumables, which in some cases, do not have ready substitutes. Some equipment and materials are needed to comply with regulations, such as proximity detection devices on continuous mining machines. The supplier base providing mining materials and equipment has been relatively consistent in recent years, although there continues to be consolidation, which has resulted in a limited number of suppliers for certain types of equipment and supplies. Any significant reduction in availability or increase in cost of any mining equipment or key supplies could adversely affect our operations and increase our costs, which could adversely affect our operating results and cash flows. Diesel fuel is one of our largest variable costs and a sustained shortage of diesel fuel could negatively and materially impact our results of operations.

In addition, the prices we pay for materials are strongly influenced by the global commodities markets. Coal mines consume large quantities of these commodities, such as steel, copper, rubber products, explosives and diesel and other liquid fuels. A rapid or significant increase in the cost of these commodities would increase our mining costs. Further, 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 will increase, which could materially adversely impact our profitability.

The U.S. and global economies have recently experienced high levels of inflation. If inflation were to remain at high levels for an extended period, or increase further, a related increase in our input costs could materially adversely affect our profitability.

We purchase coal from third parties, for use in coal blending and for other purposes, for which ready substitutes may not be immediately available. The failure of these third parties to provide coal in a timely fashion or a significant reduction in availability or an increase in the cost of these supplies could adversely affect our operations and increase our costs, which could adversely affect our operating results and cash flows.

A decline in demand for met coal would limit our ability to sell our high quality thermal coal as higher-priced met coal, which would reduce our revenues and profitability, and could affect the economic viability of some of our mines with higher operating costs.

We are able to mine, process and market some of our coal reserves as either met coal or high-quality thermal coal. In deciding our approach to these reserves, we assess the conditions in the met and thermal coal markets, including factors such as the current and anticipated future market prices of met coal and thermal coal, the generally higher price of met coal as compared to thermal coal, the lower volume of saleable tons that results when producing coal for sale in the met market rather than the thermal market, the increased costs of producing met coal, the likelihood of being able to secure a longer term sales commitment for thermal coal and our contractual commitments to deliver different types of coal to our customers. A decline in demand for met coal relative to thermal coal could cause us to shift coal from the met market to the thermal market, thereby reducing our revenues and profitability.

Our business will be adversely affected if we are unable to timely develop or acquire additional coal reserves that are economically recoverable.

Our profitability depends substantially on our ability to mine in a cost-effective manner coal reserves of the quality our customers need. Although we have coal reserves that we believe could support current production levels for multiple decades, estimating the size and quality of reserves requires significant judgment and could prove to be inaccurate. We may not be able to mine all of our reserves as profitably as we do at our current operations. Under adverse market conditions, some reserves could not be mined profitably at all. In addition, in order to develop our reserves, we must receive various governmental permits. As discussed above, some of these permits are becoming increasingly more difficult and expensive to obtain, and the review process continues to lengthen. We may be unable to obtain the necessary permits on terms that would allow us to operate profitably or at all.

Because our reserves are depleted as we mine our coal, our future success and growth depend in part on our ability to timely acquire additional coal reserves that are economically recoverable. Our planned development projects and acquisition activities may not result in significant additional reserves, and we may not succeed in developing new mines or expanding existing mines beyond our existing reserves. Replacement reserves may not be available when required or, if available, may not be able to be mined at costs comparable to those of the depleting mines. We may not be able to accurately assess the geological

characteristics of any reserves that we now own or subsequently acquire, which may adversely affect our profitability and financial condition. Exhaustion of reserves at particular mines also may have an adverse effect on our operating results due to lost production capacity from diminished or discontinued operations at those mines, as well as lay-offs, write-off charges and other costs, potentially causing an adverse effect that is disproportionate to the percentage of overall production represented by those mines. Our ability to acquire other reserves in the future could be limited by restrictions under our existing or future debt agreements, competition from other coal companies for attractive properties or the lack of suitable acquisition candidates available on commercially reasonable terms, among other factors. If we are unable to replace or increase our coal reserves on acceptable terms, our production and revenues will decline as our reserves are depleted.

If we are unable to acquire surface rights to access our coal reserves, we may be unable to obtain a permit to mine coal we own and may be required to employ expensive techniques to mine around those sections of land we cannot access in order to access other sections of coal reserves, which could materially and adversely affect our business and our results of operations.

After we acquire coal reserves, we are required to obtain a permit to mine the reserves through the applicable state agencies prior to mining the acquired coal. In part, permitting requirements provide that, under certain circumstances, we must obtain surface owner consent if the surface estate has been severed from the mineral estate, which is commonly known as a “severed estate.” At certain of our mines where we have obtained the underlying coal and the surface is held by one or more third-party owners, we are engaged in negotiations for surface rights with multiple parties. If we are unable to successfully negotiate surface rights with any or all of these surface owners, or to do so on commercially reasonable terms, we may be denied a permit to mine some or all of our coal or may find that we cannot mine the coal at a profit. If we are denied a permit, that would create significant delays in our mining operations and materially and adversely impact our business and results of operations. Furthermore, if we decide to alter our plans to mine around the affected areas, we could incur significant additional costs to do so, which could increase our operating expenses considerably and could materially and adversely affect our results of operations.

Conflicts with competing holders of mineral rights and rights to use adjacent, overlying or underlying lands could materially and adversely affect our ability to mine coal or do so on a cost-effective basis.

Our operations at times 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. Furthermore, the rights of third parties for competing uses of adjacent, overlying or underlying lands, such as oil and gas activity, coalbed methane, pipelines, roads, easements and public facilities, may affect our ability to operate as planned if our title is not superior or arrangements cannot be negotiated. 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 and results of operations.

Mining in Central Appalachia is more complex and involves more regulatory constraints than mining in other areas of the U.S., which could affect our mining operations and cost structures in these areas.

The geological characteristics of Central Appalachian coal reserves, such as depth of overburden and coal seam thickness, make them complex and costly to mine. As mines become depleted, replacement reserves may not be available or, if available, may not be able to be mined at costs comparable to those of the depleting or depleted mines. In addition, compared to mines in other areas of the country, permitting, licensing and other environmental and regulatory requirements in Central Appalachia are more costly and time consuming to satisfy. These factors could materially adversely affect the mining operations and cost structures of, and our customers’ ability to use coal produced by, our mines in Central Appalachia.

We contract with third parties to operate or reclaim certain of our mines, and our results of operations could be adversely affected if those third-party operators are ineffective.

We contract with third parties to operate certain of our mines. Under those arrangements, we retain certain contractual rights of oversight over these mines, which are operated under our permits or leases, but we do not control, and our employees do not participate in, the day-to-day operations of these mines. Operational difficulties at these mines, increased competition for contract miners from other coal producers and other factors beyond our control could affect the availability, cost and quality of coal produced for us by contractors. Disruption in our supply of contractor-produced coal could impair our ability to fill our customers’ orders or require us to pay higher prices to obtain the required coal from other sources. Any increase in the per-ton

compensation for services we pay for the production of contractor-produced coal could increase our costs and, therefore, lower our earnings and adversely affect our results of operations. We also contract with third parties to perform reclamation services for properties that are no longer in operation. If these third parties fail to meet their obligations under those contracts or are otherwise ineffective, it could increase our costs and, therefore, lower our earnings and adversely affect our results of operations.

Estimates of our economically recoverable coal reserves and coal resources involve uncertainties, and any inaccuracies in our estimates could result in lower than expected revenues, higher than expected costs, decreased profitability and asset impairments.

Our estimates of economically recoverable coal reserves and coal resources are based on engineering, economic and geological data and assumptions. Our estimates as to the quantity and quality of the coal in our reserves depend upon a variety of factors and estimates, many of which involve uncertainties and factors beyond our control and may vary considerably from actual results, such as:

- geological and mining conditions that may not be fully identified by available exploration data or that may differ from experience in current operations;
- historical production from the area compared with production from other similar producing areas;
- the assumed ability to obtain future permits and effects of regulation and taxes by governmental agencies; and
- assumptions about coal prices, operating costs, mining technology improvements, development costs and reclamation costs.

For these reasons, estimates of the economically recoverable quantities and qualities attributable to any particular property, classifications of reserves and coal resources based on risk of recovery and estimates of net cash flows expected from particular reserves prepared by different engineers or by the same engineers at different times may vary substantially. In addition, actual coal tonnage recovered from identified reserve areas or properties and revenues and expenditures with respect to our reserves and resources may vary materially from estimates. Accordingly, our estimates may not accurately reflect our actual reserves and resources. Any inaccuracy in our reserve estimates could result in lower than expected revenues, higher than expected costs, decreased profitability and asset impairments.

Provisions in our lease agreements, defects in title in our mine properties or loss of leasehold rights could limit our ability to recover coal from our properties or result in significant unanticipated costs.

We conduct a significant part of our mining operations on properties that we lease. Title to most of our leased properties and mineral rights is not thoroughly verified until a permit to mine the property is obtained, and, in some cases, title is not verified at all. Accordingly, actual or alleged defects in title or boundaries may exist, which may result in the loss of our right to mine on the property or in unanticipated costs to obtain leases or mining contracts to allow us to conduct our mining operations on the property, which could adversely affect our business and profitability. Furthermore, some leases require us to produce a minimum quantity of coal and/or pay minimum production royalties. If those requirements are not met, the leasehold interest may terminate.

Strategic transactions, including acquisitions, involve a number of risks, any of which could result in a material adverse effect on our business, financial condition or results of operations.

We have in the past, and may in the future, undertake strategic transactions such as the acquisition or disposition of coal mining and related infrastructure assets, interests in coal mining companies, joint ventures or other strategic transactions involving companies with coal mining or other energy assets. Our ability to complete these transactions is subject to the availability of attractive opportunities, including potential acquisition targets that can be successfully integrated into our existing business and provide us with complementary capabilities, products or services on terms acceptable to us, as well as general market conditions, among other things.

Risks inherent in these strategic transactions include, but are not limited to:

- accurately assessing the geological conditions of acquired properties;
- the ability to obtain and maintain surety bonds, at acceptable rates, related to acquired properties and other obligations;
- uncertainties in assessing the value, strengths, and potential profitability, and identifying the extent of all weaknesses, risks, contingent liabilities and other liabilities of acquisition candidates and strategic partners;
- the potential loss of key customers, management and employees of an acquired business;

- the ability to achieve identified operating and financial synergies from an acquisition or other strategic transactions in the amounts and on the time frame due to inaccurate assumptions underlying estimates of expected cost savings, the deterioration of general industry and business conditions, unanticipated legal, insurance and financial compliance costs, or other factors;
- the ability of management to manage successfully our exposure to pending and potential litigation and regulatory obligations;
- the ability of a purchaser to complete the transfer of operating permits related to our divested operations and to otherwise properly fulfill all assumed contractual, legal and regulatory obligations;
- unanticipated increases in competition that limit our ability to expand our business or capitalize on expected business opportunities, including retaining current customers; and
- unanticipated changes in business, industry, market, or general economic conditions that differ from the assumptions underlying our rationale for pursuing the acquisition or other strategic transactions.

The ultimate success of any strategic transaction we may undertake will depend in part on our ability to continue to realize the anticipated synergies, business opportunities and growth prospects from those transactions. We may not be able to successfully integrate the companies, businesses or properties that we acquire, invest in or partner with. Problems that could arise from the integration of an acquired business may involve:

- coordinating management and personnel and managing different corporate cultures;
- applying our safety and environmental programs at acquired mines and facilities;
- establishing, testing and maintaining effective internal control processes and systems of financial reporting for the acquired business;
- the diversion of our management's and our finance and accounting staff's resources and time commitments, and the disruption of either our or the acquired company's ongoing businesses;
- tax costs or inefficiencies; and
- inconsistencies in standards, information technology systems, procedures or policies.

Any one or more of these factors could cause us not to realize the benefits anticipated from a strategic transaction, adversely affect our ability to maintain relationships with clients, employees or other third parties or reduce our earnings.

Moreover, any strategic transaction we pursue could materially affect our liquidity and capital resources and may require us to incur indebtedness, seek equity capital or both. Future transactions could also result in our assuming more long-term liabilities relative to the value of the acquired assets. Further, acquisition accounting rules require changes in certain assumptions made subsequent to the measurement period, as defined in current accounting standards, to be recorded in current period earnings, which could affect our results of operations.

Our business requires substantial capital investment and maintenance expenditures, which we may be unable to provide.

Our business plan and strategy require substantial capital expenditures. We require capital for, among other purposes, acquisition of surface rights, equipment and the development of our mining operations, capital renovations, maintenance and expansions of plants and equipment and compliance with safety, health and environmental laws and regulations. Future debt or equity financing may not be available on satisfactory terms or at all or, if available, may result in dilution. If we are unable to obtain additional capital, we may not be able to maintain or increase our existing production rates, and we could be forced to reduce or delay capital expenditures or change our business strategy, sell assets or restructure or refinance our indebtedness, all of which could have a material adverse effect on our business or financial condition.

Our workforce could become increasingly unionized in the future and our unionized or union-free workforce could strike, which could adversely affect the stability of our production and reduce our profitability.

Approximately 97% of our total workforce and approximately 96% of our hourly workforce was union-free as of December 31, 2023. However, under the National Labor Relations Act, employees have the right at any time to form or affiliate with a union. Any further unionization of our employees or the employees of third-party contractors who mine coal for us could adversely affect the stability of our production and reduce our profitability.

Our union-represented employees could strike, which would disrupt our production, increase our costs and disrupt shipments of coal to our customers, and could result in the closure of affected mines, all of which could reduce our profitability.

Certain provisions in our coal supply agreements may result in economic penalties upon our failure to meet specifications.

Most of our coal supply agreements contain provisions requiring us to deliver coal meeting quality thresholds for certain characteristics such as BTUs, sulfur content, ash content, grindability, moisture and ash fusion temperature. Failure to meet these specifications could result in economic penalties, including price adjustments, the rejection of deliveries or termination of the contracts. Further, some of our coal supply agreements allow our customers to terminate the contract in the event of regulatory changes that restrict the type of coal the customer may use at its facilities or the use of that coal or increase the price of coal or the cost of using coal beyond specified limits. In addition, our coal supply agreements typically contain force majeure provisions allowing temporary suspension of performance by us or the customer during specified events beyond the control of the affected party. As a result of these issues, we may not achieve the revenue or profit we expect to achieve from our coal supply agreements.

Risks Relating to Our Liquidity

The need to maintain capacity for required LCs could limit our ability to provide financial assurance for self-insured obligations and negatively impact our ability to fund future working capital, capital expenditure or other general corporate requirements.

On October 27, 2023, we terminated our existing Second Amended and Restated Asset-Based Revolving Credit Agreement dated December 6, 2021 (“ABL Agreement”) and along with certain of our directly and indirectly owned subsidiaries entered into a new Credit Agreement (the “New ABL Agreement”). The New ABL Agreement continues to include an asset-based revolving credit facility (the “New ABL Facility”), which among other things, provides for the issuance of LCs.

Obligations secured by LCs may increase in the future, for example due to increased collateral obligations associated with black lung obligations. If we do not maintain sufficient borrowing capacity under our letter of credit facilities, we may be unable to provide financial assurance for self-insured obligations which could negatively impact our ability to fund future working capital, capital expenditure or other general corporate requirements.

The terms of our New ABL Facility impose operating and financial restrictions on us, which may limit our ability to respond to changing business and economic conditions.

Under the New ABL Facility, we may borrow cash or obtain LCs, on a revolving basis, in an aggregate amount of up to \$155.0 million. We may request an increase to the capacity of the facility of up to \$75.0 million provided that \$25.0 million may be solely for the purpose of providing additional availability to obtain cash collateralized LCs. Availability under the New ABL Facility is calculated monthly and fluctuates based on qualifying amounts of coal inventory, trade accounts receivable and in certain circumstances specified amounts of cash. We must maintain minimum Liquidity, as defined in the New ABL Agreement, of \$75.0 million. The New ABL Facility matures on October 27, 2027. As part of the transition from the previous ABL Facility to the New ABL Facility, we temporarily cash collateralized outstanding LCs until replacement LCs could be issued under the New ABL Facility. As of December 31, 2023, we had \$31 thousand of cash collateralized LCs remaining to be replaced. During the first quarter of 2024, the remaining cash collateralized LCs from the previous ABL Facility were cancelled with no replacement required and the cash collateral was returned.

The terms of the New ABL Facility impose operating and financial restrictions on us and our subsidiaries, which may limit our ability to respond to changing business and economic conditions. For example, we are limited in our ability to incur additional indebtedness, make particular types of investments, incur certain types of liens, engage in fundamental corporate changes, enter into transactions with affiliates, make substantial asset sales, make certain restricted payments, enter into amendments or waivers to certain agreements, conduct certain sale leasebacks or enter into certain burdensome agreements. These covenants could adversely affect our ability to finance our future operations or capital needs or to execute preferred business strategies. In addition, complying with these covenants may make it more difficult for us to successfully execute our business strategy and compete against companies who are not subject to such restrictions. We regularly evaluate opportunities to enhance our capital structure and financial flexibility through a variety of methods, including repayment or repurchase of outstanding debt, amendment of our credit facility and other facilities, and other methods. As a result of any of these actions, the restrictions and covenants that apply to us may become more restrictive or otherwise change.

Any failure to comply with those covenants may constitute a breach under the New ABL Facility that could result in the acceleration of all or a substantial portion of any outstanding indebtedness and termination of revolving credit commitments under the New ABL Facility. As of December 31, 2023, we are in compliance with the operating and financial covenants under the New ABL Facility. Our inability in the future to maintain our New ABL Facility could materially adversely affect our liquidity and our business.

Operating results below current levels, or other adverse factors, including a significant increase in interest rates, could result in our being unable to comply with our covenants and payment obligations contained in our borrowing arrangements. If we violate these covenants or obligations under any of these agreements and are unable to obtain waivers from our lenders, our debt under all of these agreements would be in default and could be accelerated by our lenders. If our indebtedness is accelerated, we may not be able to repay our debt or borrow sufficient funds to refinance it. Even if we were able to obtain new financing, it may not be on commercially reasonable terms or on terms that are acceptable to us. If our debt is in default for any reason, our business, financial condition, results of operations and cash flows could be materially and adversely affected.

Failure to obtain or renew surety bonds on acceptable terms could affect our ability to secure reclamation and coal lease obligations, which could adversely affect our ability to mine or lease coal.

Federal and state laws require us to obtain surety bonds to secure payment of certain long-term obligations such as mine closure or reclamation costs, federal and state workers' compensation costs (including related to black lung), coal leases and other obligations. These bonds are typically renewable annually. Under applicable regulations, self-bonding may not be available to us as a means to comply with our reclamation bonding obligations for the foreseeable future. Surety bond issuers and holders may not continue to renew the bonds, may demand less favorable terms upon renewal or may impose new or increased collateral requirements. As of December 31, 2023, we had outstanding surety bonds with third parties of approximately \$177.1 million. Surety bond issuers and holders may demand additional collateral, unfavorable terms or higher fees. Our failure to retain, or inability to acquire, surety bonds or to provide a suitable alternative could adversely affect our ability to mine or lease coal, which would materially adversely affect our business and results of operations. That failure could result from a variety of factors, including lack of availability, higher expense or unfavorable market terms, the exercise by third-party surety bond issuers of their right to refuse to renew the surety bonds, restrictions on availability of collateral for current and future third-party surety bond issuers under the terms of any credit arrangements then in place, or our inability to comply with our reclamation bonding obligations through self-bonding. In addition, as a result of increasing credit pressures on the coal industry, it is possible that surety bond providers could demand cash collateral as a condition to providing or maintaining surety bonds. Any such demands, depending on the amount of any cash collateral required, could have a material adverse impact on our liquidity and financial position. If we are unable to meet cash collateral requirements and cannot otherwise obtain or retain required surety bonds, we may be unable to satisfy legal requirements necessary to conduct our mining operations.

Difficulty in acquiring surety bonds, or additional collateral requirements, would increase our costs and likely require greater use of alternative sources of funding for this purpose, which would reduce our liquidity. If we are unable to provide the financial assurance that is required by state and federal law to secure our reclamation and coal lease obligations, our ability to mine or lease coal and, as a result, our results of operations could be materially and adversely affected.

Pressure on our business, cash flow and liquidity could materially and adversely affect our ability to fund our business operations or react to and withstand changing market and industry conditions. Additional sources of funds may not be available.

A significant source of liquidity is our cash balance. Access to additional funds from liquidity-generating transactions or other sources of external financing may not be available to us and, if available, would be subject to market conditions and certain limitations, including our credit rating and covenant restrictions in our revolving credit facility.

Our indebtedness, as it may exist from time to time, exposes us to various risks.

At December 31, 2023, we had \$10.4 million of indebtedness outstanding, of which \$8.6 million is scheduled to mature in the next three years.

Our indebtedness could have important consequences to our business, particularly if the amount of our indebtedness should materially increase in the future. For example, it could:

- make it more difficult for us to pay or refinance our debts as they become due during adverse economic and industry conditions because any related decrease in revenues could cause us to not have sufficient cash flows from operations to make our scheduled debt payments;
- force us to seek additional capital, restructure or refinance our debts, or sell assets;
- cause us to be less able to take advantage of significant business opportunities such as acquisition opportunities and to react to changes in market or industry conditions;
- cause us to use a portion of our cash flow from operations for debt service, reducing the availability of working capital and delaying or preventing investments, capital expenditures, research and development and other business activities;
- cause us to be more vulnerable to general adverse economic and industry conditions;

- expose us to the risk of increased interest rates because certain of our borrowings are at variable rates of interest;
- expose us to the risk of foreclosure on substantially all of our assets and those of most of our subsidiaries, which secure certain of our indebtedness if we default on payment or are unable to comply with covenants or restrictions in any of the agreements;
- limit our ability to borrow additional monies in the future to fund working capital, capital expenditures and other general corporate purposes; and
- result in a downgrade in the credit ratings of our indebtedness, which could harm our ability to incur additional indebtedness and result in more restrictive borrowing terms, including increased borrowing costs and more restrictive covenants, all of which could affect our internal cost of capital estimates and therefore impact operational and investment decisions.

We may incur additional secured or unsecured indebtedness in the future, subject to compliance with covenants in our existing debt agreements. Our ability to meet future debt service obligations will depend on our future cash flow from operations and our ability to restructure or refinance our debt, which will depend on the condition of the capital markets and our financial condition at that time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. These alternative measures may not be successful and may not permit us to meet our scheduled debt service obligations, and the terms of existing or future debt instruments may restrict us from adopting some of these alternatives.

Risks Relating to the Ownership of Our Common Stock

The requirements of being a public company, including compliance with the reporting requirements of the Securities Exchange Act of 1934, as amended (the “Exchange Act”), and the requirements of the Sarbanes-Oxley Act, require application of significant resources and management attention, and we may be unable to comply with these requirements in a timely or cost-effective manner.

As a public company, we must comply with laws, regulations and requirements, certain corporate governance provisions of the Sarbanes-Oxley Act of 2002, related regulations of the SEC and the requirements of the New York Stock Exchange. Complying with these statutes, regulations and requirements occupies a significant amount of time for our Board of Directors (the “Board”) and management and requires us to incur significant costs. We are required to:

- maintain a comprehensive compliance function;
- comply with rules promulgated by the New York Stock Exchange;
- prepare and distribute periodic public reports in compliance with our obligations under the federal securities laws;
- maintain internal policies; and
- engage outside counsel and accountants in the above activities.

We are responsible for assessing the operating effectiveness of internal controls over financial reporting and we may conclude that our internal controls over financial reporting are ineffective. Additionally, our independent registered public accounting firm may issue an adverse report indicating that our internal controls are not effective due to deficiencies in how our controls are documented, designed, operated or reviewed. Efforts to remediate any such deficiencies and otherwise comply with these requirements may strain our resources, and we may be unable to do so in a timely or cost-effective manner.

Our share repurchase program could affect the price of our common stock and increase volatility and may be suspended or terminated at any time, which may result in a decrease in the trading price of our common stock.

On February 21, 2023 and October 31, 2023, the Board approved increases to the existing common share repurchase program adopted March 4, 2022, bringing the total authorization to repurchase the Company’s stock to \$1.2 billion and \$1.5 billion, respectively. This share repurchase program does not obligate us to repurchase any dollar amount or number of shares of our common stock and may be suspended or discontinued at any time, which could cause the market price of our common stock to decline.

Repurchases pursuant to our share repurchase program could affect the price of our common stock and increase its volatility. Important factors that could cause us to limit, suspend or delay our share repurchases, without prior notice, and that could in any event impact our management’s exercise of our discretion as to the amount and timing of such repurchases, include market conditions, the trading price of the stock, applicable legal requirements, compliance with the provisions of our debt agreements, and other factors. The existence of our share repurchase program could cause the price of our common stock to be higher than it would be in the absence of such a program and could potentially reduce the market liquidity for our common stock. Additionally, repurchases under our share repurchase program would diminish our cash reserves, which could

adversely affect our operating results. There can be no assurance that any share repurchases would enhance stockholder value because the market price of our common stock may decline below the levels at which we repurchased such shares. Any failure to repurchase shares could negatively impact our reputation, investor confidence in us and our stock price.

Dividends on our common stock are only payable if declared by the Board and permitted by Delaware law.

Although we have done so in the past, we do not currently pay dividends on our common stock. Dividends on our common stock may be paid only if declared by the Board. The Board is not legally obligated or required to declare dividends on our common stock even if we have funds available for that purpose. In addition, even if the Board wishes to declare a dividend, we cannot make payments of cash in respect of dividends to the extent such payments are not permitted under Delaware law. If we do not declare and pay dividends on our common stock as expected, the market price of our common stock is likely to be adversely affected.

An active, liquid and orderly trading market for our common stock may not be maintained, and our stock price may be volatile.

Alpha's common stock trades on the New York Stock Exchange under the ticker symbol "AMR." Active, liquid and orderly trading markets usually result in less price volatility and more efficiency in carrying out investors' purchase and sale orders. An active, liquid and orderly trading market for our common stock may not be maintained, however. The market price of our common stock could vary significantly as a result of a number of factors, some of which are beyond our control. In the event of a drop in the market price of our common stock, shareholders could lose a substantial part or all of their investment in our common stock.

The following factors, among others, could affect our stock price:

- our operating and financial performance, including reserve estimates;
- an unexpected mine or environmental incident;
- quarterly variations in the rate of growth of our financial indicators, such as net income per share, net income and revenues;
- the public reaction to our press releases, our other public announcements and our filings with the SEC;
- strategic actions by our competitors;
- changes in revenue or earnings estimates, or changes in recommendations or withdrawal of research coverage, by equity research analysts;
- speculation in the press or investment community;
- research analysts' coverage of our common stock, or their failure to cover our common stock;
- sales of our common stock by us, our directors or officers or the selling stockholders or the perception that such sales may occur;
- our payment of dividends;
- changes in accounting principles, policies, guidance, interpretations or standards;
- additions or departures of key management personnel;
- actions by our stockholders;
- general market conditions, including fluctuations in commodity prices;
- public sentiment regarding climate change and fossil fuels;
- domestic and international economic, legal and regulatory factors unrelated to our performance; and
- the realization of any of the other risks described under this "Risk Factors" section or described elsewhere in this document.

The stock markets in general have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. One factor fueling this volatility has been information available in public media published by third parties, including blogs, articles, message boards and social and other media, that may include statements not attributable to the company under discussion and may not be reliable or accurate. Broad market fluctuations or inaccurate and unreliable information about our company may adversely affect the trading price of our common stock.

Future sales of our common stock in the public market, or the perception that such sales may occur, could reduce our stock price, and any additional capital raised by us through the sale of equity or convertible securities may dilute your ownership.

We may issue additional shares of common stock or convertible securities in subsequent public offerings. We cannot predict the size of future issuances of our common stock or securities convertible into common stock or the effect, if any, that

future issuances and sales of shares of our common stock will have on the market price of our common stock or the dividend amount payable per share on our common stock, if any. Sales of substantial amounts of our common stock (including shares issued in connection with an acquisition), or the perception that such sales could occur, may adversely affect prevailing market prices of our common stock or the dividend amount payable per share on our common stock.

We may issue preferred stock with terms that could adversely affect the voting power or value of our common stock.

Our second 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 having such designations, preferences, limitations and relative rights, including preferences over our common stock respecting dividends and distributions, as the Board may determine. The terms of one or more classes or series of preferred stock could adversely impact the voting power or value of our common stock. For example, we might grant holders of preferred stock the right to elect some number of our directors in all events or on the happening of specified events or the right to veto specified transactions. Similarly, the repurchase or redemption rights or liquidation preferences we might assign to holders of preferred stock could affect the residual value of the common stock, as the Board may determine.

Provisions in our organizational documents and the instruments governing our debt may discourage a takeover attempt, even if doing so might be beneficial to our stockholders.

Provisions contained in our certificate of incorporation and bylaws, as amended, could impose impediments to the ability of a third party to acquire us even if a change of control would be beneficial to our stockholders. Provisions of our certificate of incorporation and bylaws impose various procedural and other requirements, which could make it more difficult for stockholders to effect certain corporate actions. For example, our certificate of incorporation authorizes the Board to determine the rights, preferences, privileges and restrictions of unissued series of preferred stock, without any vote or action by our stockholders. Thus, the Board can authorize the issuance of shares of preferred stock with voting or conversion rights that could adversely affect the voting or other rights of holders of our common stock. These provisions may have the effect of delaying or deterring a change of control of our company and could limit the price that certain investors might be willing to pay in the future for shares of our common stock.

A change of control (as defined under the instruments governing our debt) is an event of default, permitting our lenders to accelerate the maturity of certain borrowings. Further, our borrowing arrangements impose other restrictions on us, including with respect to mergers or consolidations with other companies and the sale of substantially all of our assets. These provisions could prevent or deter a third-party from acquiring us even where the acquisition could be beneficial to our stockholders.

Our bylaws provide, subject to certain exceptions, that the Court of Chancery of the State of Delaware and the federal district courts of the United States are the exclusive forums for certain stockholder litigation matters, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or stockholders.

Our bylaws provide, subject to limited exceptions, that the Court of Chancery of the State of Delaware is, to the fullest extent permitted by law, the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf; (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers or other employees to us or our stockholders; (iii) any action asserting a claim against us, any director or our officers or employees arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation (including any certificate of designations relating to any class or series of preferred stock) or our bylaws; or (iv) any action asserting a claim against us, any director or our officers or employees that is governed by the internal affairs doctrine. This provision does not apply to suits brought to enforce a duty or liability under the Exchange Act or any other claim for which the U.S. federal courts have exclusive jurisdiction. In addition, our bylaws provide that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. Any person or entity purchasing or otherwise acquiring any interest in shares of our capital stock shall be deemed to have notice of and to have consented to the provisions of our bylaws described above. 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 any of our directors, officers, other employees or stockholders which may discourage lawsuits with respect to such claims. Alternatively, if a court were to find the choice of forum provision that is contained in our bylaws to be inapplicable or unenforceable in an action, we may incur additional costs associated with resolving such action in other jurisdictions, which could materially adversely affect our business, financial condition and results of operations.

Item 1B. Unresolved Staff Comments

None.

Item 1C. Cybersecurity

Cybersecurity Risk Management and Strategy

Risk Assessment and Management

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, analyze seismic and drilling information, estimate quantities of met coal reserves, as well as other activities related to our businesses. We own and operate some of these systems and applications while others are owned and operated by third-party service providers.

We maintain a cybersecurity program employing many components and strategies to mitigate and remediate day-to-day cybersecurity threats and exposures. This program, along with a robust information technology internal controls framework, helps to ensure the confidentiality, integrity and availability of our information systems. The program includes elements for identifying, assessing and managing material risks from cybersecurity threats. Our incident response and change management policies and procedures were designed based on guidelines from the National Institute of Standards and Technology Cybersecurity Framework.

We take a risk-based approach to cybersecurity, which begins with the identification and evaluation of cybersecurity risks or threats that could affect our operations, finances, legal or regulatory compliance, or reputation. We employ continuous monitoring systems and other technologies and security controls to assist us with the identification of cybersecurity risks and threats. At least annually we conduct a third-party risk assessment to identify cybersecurity risks associated with third-party vendors and service providers. When cybersecurity risks are identified, we prioritize mitigation strategies based upon risks' potential impact, likelihood, velocity and vulnerability, considering both quantitative and qualitative factors. These strategies include, among others, the application, adoption or modification of cybersecurity policies and procedures, implementation of administrative, technical and physical controls and employee training, education and awareness initiatives.

Our cybersecurity risk management includes continuous monitoring of networks and systems for potential signs of suspicious activity. Our Information Systems and Technology Department (the "IT Department") monitors security alerts or indicators and initiates triage, verification and remediation actions when needed. We also provide mechanisms and training for employees to report to the IT Department any unusual or potentially malicious activity they observe for proper identification and analysis.

In the event of a significant cybersecurity incident, we establish an incident response team that works in conjunction with the IT Department to identify, contain, eradicate and, if necessary, recover from a cybersecurity incident. Through third parties we are also able to rapidly deploy forensic analysis, legal services, notification and call center services and credit and identity monitoring if required.

We track key performance indicators and cybersecurity metrics to evaluate the efficacy of our cybersecurity controls and practices. Further, our cybersecurity program is periodically reviewed by senior members of management and adjusted as needed in an effort to maintain the program's agility and responsiveness as circumstances and technologies evolve, new cybersecurity threats emerge and regulations change.

We separately operate an enterprise risk management ("ERM") program to identify, evaluate and manage risks. Cybersecurity risks are evaluated alongside other critical business risks under the ERM program to align cybersecurity efforts with our broader business goals and objectives. We believe that integrating cybersecurity risks into our ERM program fosters a proactive and holistic approach to cybersecurity, which helps safeguard our operations, financial condition and reputation in an ever-evolving threat landscape. Cybersecurity risks are further considered and evaluated as part of an annual risk assessment performed independently by our internal audit department.

Incident Response

We maintain an incident response policy and program focused upon detecting, managing, documenting and reporting incidents affecting our systems and data, including those specific to cybersecurity. In the event of a significant cybersecurity

incident, we appoint a dedicated incident team, including a team leader, responsible for managing and coordinating incident response efforts. These efforts may include detecting, identifying, defending against, responding to and, if necessary, recovering from cybersecurity incidents. Incidents that meet certain thresholds are escalated to senior members of management, internal legal advisors, communication specialists and other key stakeholders for additional guidance and action.

Use of Third Parties

Cybersecurity Service Providers and Third-Party Consultants. At least annually we engage independent cybersecurity consultants, auditors and other third parties to assess and enhance our cybersecurity risk assessment and practices. These third parties conduct independent assessments, penetration testing and vulnerability assessments to identify weaknesses and recommend improvements. Additionally, we employ a number of third-party tools and technologies as part of our efforts to enhance cybersecurity functions and monitoring.

Oversight of Third-Party Service Providers. We use third-party service providers to support our operations and many of our technology initiatives, including third parties that house financial or sensitive information. Our technology acquisition policy and our internal controls framework require us to obtain and review attestation reports regarding these third-party service providers and their sub-service processors or providers and their internal controls, complementary user entity controls and contractual obligations, including those specific to cybersecurity. We evaluate cybersecurity risks associated with our use of third-party service providers, which may include a review of a service provider's cybersecurity posture or a recommendation of specific mitigation controls. We determine and prioritize service provider risk based on potential threat impact and likelihood and these risk determinations determine the level of due diligence and ongoing compliance monitoring required for each service provider.

Risks from Material Cybersecurity Threats

As of the date of this report, we have not identified any cybersecurity threats that have materially affected or are reasonably anticipated to have a material effect on the organization. Although we have not previously experienced cybersecurity incidents that are individually, or in the aggregate, material, we have experienced cyberattacks in the past, which we believe have thus far been deflected or mitigated by our preventative, detective and responsive measures. For additional discussion of our cybersecurity related risks, see "Item 1.A Risk Factors."

Cybersecurity Governance

Board Oversight

The Board is responsible for overseeing management's assessments of major risks facing the Company and for reviewing options to mitigate these risks. The Board's oversight of cybersecurity risks occurs at both the Board level and through its Audit Committee.

The Board. The Chief Executive Officer, the Chief Operating Officer, the Chief Financial Officer, other members of senior management and other personnel and advisors, as requested by the Board, report on our financial, operating and commercial strategies, as well as major related risks, which may include cybersecurity risks, at regularly scheduled meetings of the Board. The Board may request follow-up data and presentations to address any specific concerns or recommendations.

The Audit Committee. The Audit Committee reviews with our management team, including our Senior Vice President – Information Systems and Technology, our cybersecurity frameworks, policies, technologies, programs, opportunities, strategies and risks. These presentations highlight any significant cybersecurity incidents, the cyber threat landscape, cybersecurity program enhancements, cybersecurity risks, related remediation and mitigation activities, security user awareness and reporting training program and any other relevant cybersecurity topics. In addition, members of our Legal Department advise the Audit Committee as needed regarding cybersecurity-related legal matters, including disclosure requirements. Management believes that these reports help to provide the Audit Committee with an informed understanding of our cybersecurity program, risks and strategies. The Audit Committee may request follow-up data and presentations to address any specific concerns or recommendations. In addition to this periodic reporting, significant cybersecurity risks or threats may also be escalated to the Audit Committee as needed based upon our cyber incident reporting process. The Audit Committee reports regularly to the entire Board and reviews with the Board any major issues that arise at the committee level, which may include cybersecurity risks.

Management's Role

Our IT Department addresses current and emerging cybersecurity matters. This function is led by our Senior Vice President – Information Systems and Technology, who reports to our Chief Financial Officer. The IT Department's security team, a cross-functional group composed of members with substantial professional and technical information technology experience, oversees the cybersecurity program to help ensure the confidentiality, integrity and availability of the company's systems and mitigate day-to-day threats and exposures. It is responsible for measuring and managing cybersecurity risk, including the prevention, detection, mitigation and remediation of cybersecurity incidents and also for implementing cybersecurity policies, programs, procedures and strategies. The security team reports significant cybersecurity incidents to senior management, internal legal advisors, communication specialists and other key stakeholders as required.

Item 2. Properties

Our Properties

Refer to "Item 1. Business" for information on our active mining properties.

Our corporate headquarters consists of approximately 50,000 square feet of leased office space at 340 Martin Luther King Jr. Boulevard in Bristol, Tennessee.

Coal Reserves and Resources

As of December 31, 2023, we estimate that we owned or controlled approximately 316.0 million tons of marketable proven and probable bituminous coal reserves and approximately 513.5 million tons of in situ bituminous coal resources. Our coal reserve and resource estimates were prepared by Marshall Miller & Associates, Inc. ("Marshall Miller"), an independent professional mine engineering and geological consulting firm. Technical Summary Reports prepared by Marshall Miller, as a qualified person, for each of our material mining properties are filed as exhibits to this Annual Report on Form 10-K and incorporated herein by reference.

Coal reserve and resource estimates are based on data obtained from drilling activities and other available geologic data. Estimating reserves and resources requires the use of a geologic, engineering, and economic assumptions. Our engineering, land and operational support personnel work closely with Marshall Miller to ensure the integrity and accuracy of the data used to calculate the estimates as well as to ensure the assumptions used are reasonable based on our historical results as well as current and future anticipated mine plans. We provide Marshall Miller with historical property information including property maps, deed, lease, and permit information, drilling and lab results, mine plans, production quantities, development, capital, and operating costs as well as market information. For our active and certain idled Met mining properties, Marshall Miller performs an initial assessment and based on the level of geological evidence estimates our coal resources and classifies such resources as either inferred, indicated or measured. When considered cost beneficial by the Company, Marshall Miller further conducts a pre-feasibility study to estimate our coal reserves and classify such reserves as either proven or probable. The estimates and reports prepared by Marshall Miller are reviewed by our personnel to ensure such reports have been prepared in accordance with applicable rules and regulations and that estimates are based on reasonable assumptions and reflect known facts and circumstances updated through year-end.

Economic analysis is a required part of the process of estimating coal reserves and resources. For a coal reserve or resource to be considered economic, generally revenue generated from its sale must exceed its total cost of production (including consideration of development, capital, and operating costs).

In determining coal reserves as of December 31, 2023, the following estimated market pricing was utilized:

Coal quality	Market Pricing Per Ton ^{(1) (2)}
High-Vol. A	\$162
High- Vol. B	\$140
Mid-Vol.	\$163
Low-Vol.	\$163
Thermal	\$74

⁽¹⁾ Market pricing shown on U.S. East Coast basis.

⁽²⁾ Met and thermal pricing based on 10-year and 3-year average, respectively of forecasted pricing from pricing services.

The following is a summary of our estimated marketable proven and probable coal reserves as of December 31, 2023 as determined by Marshall Miller:

Coal Reserves (Tons in thousands)								
Mining Complex	Location	Marketable Coal Reserves ⁽¹⁾			Reserve Control		Stage / Permit Status Production Stage	
		Total	Proven	Probable	Owned	Leased	Permitted	Not Permitted
Met								
Aracoma	WV	41,276	26,252	15,024	5,473	35,803	22,664	18,612
Kepler	WV	41,190	23,031	18,159	258	40,932	15,065	26,125
Kingston	WV	38,657	23,051	15,606	632	38,025	22,024	16,633
Marfork	WV	97,653	53,333	44,320	2,214	95,439	50,651	47,002
McClure/ Toms Creek	VA	68,747	47,753	20,994	—	68,747	38,648	30,099
Elk Run	WV	28,434	17,341	11,093	139	28,295	4,724	23,710
Total		315,957	190,761	125,196	8,716	307,241	153,776	162,181

⁽¹⁾ Minimum seam height generally 30 inches for underground mines.

Coal Reserves (Tons in thousands)									
Mining Complex	Location	Coal Type/Quality							Recovery Percentage ⁽²⁾
		Met Coal by Volatility				Thermal	Sulfur		
		High-Vol A	High-Vol B	Mid-Vol	Low-Vol	Thermal ⁽¹⁾	< 1%	> 1%	
Met									
Aracoma	WV	—	41,276	—	—	—	36,836	4,440	28 %
Kepler	WV	—	—	5,026	36,164	—	41,190	—	42 %
Kingston	WV	20,584	—	1,632	9,722	6,719	10,528	28,129	41 %
Marfork	WV	64,318	—	2,555	26,132	4,648	88,588	9,065	30 %
McClure /Toms Creek	VA	6,265	—	60,936	—	1,546	68,747	—	31 %
Elk Run	WV	—	28,434	—	—	—	28,434	—	21 %
Total		91,167	69,710	70,149	72,018	12,913	274,323	41,634	

⁽¹⁾ Kingston thermal reserves primarily proven and >1% sulfur; Marfork and McClure/Toms Creek thermal reserves primarily probable and <1% sulfur.

⁽²⁾ Recovery percentage defined as estimated coal reserves divided by related estimated in situ measured and indicated coal resources.

In performing an initial assessment for purposes of determining coal resources as of December 31, 2023, the following estimated market pricing was utilized:

Complex	Market Pricing Per Ton ⁽¹⁾⁽²⁾
Aracoma	\$154
Kepler	\$167
Kingston	\$181
Marfork	\$171
McClure/Toms Creek	\$177
Power Mountain	\$154
Elk Run	\$150

⁽¹⁾ Market pricing shown on U.S. East Coast basis.

⁽²⁾ Pricing shown for primary product judgmentally selected by qualified person based on review of historical average pricing for each complexes coal products over the past 5 years.

The following is a summary of the Company's estimated in situ inferred, indicated, and measured coal resources (exclusive of coal reserves) as of December 31, 2023 as determined by Marshall Miller:

Coal Resources ⁽¹⁾ (Tons in thousands)								
Mining Complex	Location	In Situ Coal Resources ⁽²⁾			Resource Control		Stage / Permit Status Exploration Stage	
		Total	Indicated	Measured	Owned	Leased	Permitted	Not Permitted
Met								
Aracoma	WV	131,383	49,707	81,676	46,592	84,791	20,668	110,715
Kepler	WV	32,866	25,857	7,009	596	32,270	3,901	28,965
Kingston	WV	26,662	10,957	15,705	13,864	12,798	—	26,662
Marfork	WV	156,436	47,377	109,059	61,168	95,268	12,408	144,028
McClure/ Toms Creek	VA	43,629	13,102	30,527	—	43,629	19,060	24,569
Power Mountain	WV	54,683	23,739	30,944	16,695	37,988	22,446	32,237
Elk Run	WV	67,883	22,360	45,523	—	67,883	8,681	59,202
Total		513,542	193,099	320,443	138,915	374,627	87,164	426,378

⁽¹⁾ Amounts shown exclusive of coal reserves.

⁽²⁾ Inferred Resources were not considered material and have not been presented.

Coal Resources ⁽¹⁾ (Tons in thousands)									
Mining Complex	Location	Coal Type/Quality							Expected Recovery Percentage ⁽²⁾
		Met Coal by Volatility				Thermal	Sulfur		
		High-Vol A	High-Vol B	Mid-Vol	Low-Vol	Thermal	< 1%	> 1%	
Met									
Aracoma	WV	—	131,383	—	—	—	58,564	72,819	21 %
Kepler	WV	—	—	6,948	25,918	—	30,514	2,352	48 %
Kingston	WV	—	—	3,189	23,473	—	26,662	—	27 %
Marfork	WV	104,124	—	3,684	43,799	4,829	60,693	95,743	30 %
McClure /Toms Creek	VA	8,049	—	35,580	—	—	23,724	19,905	24 %
Power Mountain	WV	—	54,683	—	—	—	5,938	48,745	31 %
Elk Run	WV	—	67,883	—	—	—	—	67,883	28 %
Total		112,173	253,949	49,401	93,190	4,829	206,095	307,447	

⁽¹⁾ Amounts shown exclusive of coal reserves.

⁽²⁾ Expected recovery percentage defined as potential estimated recoverable tons divided by estimated in situ measured and indicated coal resources.

Our coal reserves and resources are owned or are controlled through leases with third parties, which have varied expiration dates and either have options to renew or are expected to be renewed until all mineable and merchantable coal is exhausted. Leases require the payment of production royalties to lessors based on a stated percentage of sales revenue less freight cost and may contain annual minimum payment requirements. We permit coal reserves and resources in advance of mining. Currently, there are no known permitting issues that would impact the reporting of our coal reserves or resources. However, also refer to "Item 1. Business—Environmental and Other Regulatory Matters" and "Item 1A. Risks Factors—Risks relating to regulatory and legal developments."

Our coal reserve and resource estimates are updated periodically to reflect coal production, acquisitions and dispositions of mineral interests, new drilling, mine or geological data, and changes in regulations, market conditions or other economic factors. As coal seams in the United States have been mined for many years and are well established, we do not conduct material exploration activity. However, we periodically conduct drilling of additional core holes to provide additional geological evidence as part of our routine mine permitting and planning processes. The following is a summary of the changes in our coal reserves and resources for the year-ended December 31, 2023:

Changes in Coal Reserves (Tons in thousands)							
	12/31/2022						12/31/2023
Mining Complex	Coal Reserves	Acquired/Leased	Pre-Feasibility ⁽¹⁾	Change in Mine Plan	Divested ⁽²⁾	Production	Coal Reserves
Met							
Aracoma	40,114	—	2,957	820	—	(2,615)	41,276
Kepler	43,954	—	—	116	(917)	(1,963)	41,190
Kingston	32,892	—	6,262	1,724	—	(2,221)	38,657
Marfork	106,210	354	—	(4,455)	—	(4,456)	97,653
McClure/Toms Creek	72,094	—	612	(274)	—	(3,685)	68,747
Elk Run	41,442	—	—	—	(12,985)	(23)	28,434
Total	336,706	354	9,831	(2,069)	(13,902)	(14,963)	315,957

⁽¹⁾ Mineral areas subjected to Pre-feasibility study in current period.

⁽²⁾ Mineral control released through transfer, termination or lapse of lease, or sale of property.

Changes in Coal Resources (Tons in thousands)							
	12/31/2022						12/31/2023
Mining Complex	Coal Resources	Initial Assessment ⁽¹⁾	Pre-Feasibility ⁽²⁾	Change in Mine Plan	Divested	Production	Coal Resources
Met							
Aracoma	143,815	—	(14,029)	1,597	—	—	131,383
Kepler	34,246	—	—	(994)	(386)	—	32,866
Kingston	21,453	5,209	—	—	—	—	26,662
Marfork	159,115	—	—	(2,679)	—	—	156,436
McClure/Toms Creek	43,044	—	(2,692)	3,277	—	—	43,629
Power Mountain	57,777	—	—	(953)	—	(2,141)	54,683
Elk Run	67,883	—	—	—	—	—	67,883
Total	527,333	5,209	(16,721)	248	(386)	(2,141)	513,542

⁽¹⁾ Mineral areas subjected to initial assessment in current year.

⁽²⁾ Mineral areas subjected to Pre-feasibility study in the current year.

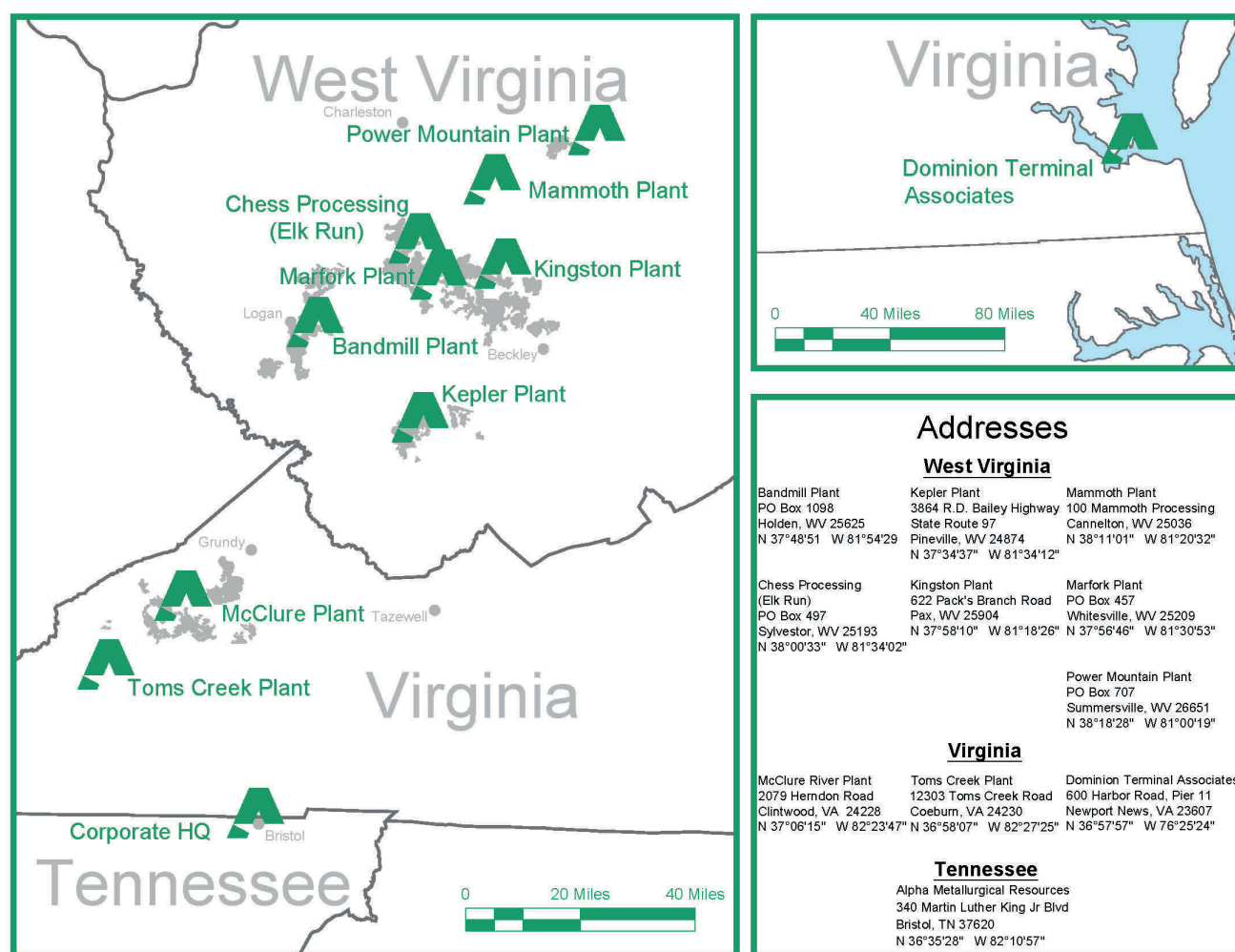
Internal Controls Disclosure

The preparation of coal reserve and resource estimates is conducted in accordance with the Company's prescribed internal control procedures, which are designed to ensure the reliability of such estimates. On an annual basis, Company personnel meet with the independent qualified person to provide updates to the data and assumptions to be used in performing the reserve and resource estimates. Company personnel review the work of the qualified person to ensure such work is prepared in accordance with applicable rules and regulations and that the data and assumptions used are supportable based on historical results and current and future mine plans and reflect known facts and circumstances through the reporting date. For example, the Company's land personnel verify the property maps and control areas used by the qualified person based on review of underlying deed and lease records. The Company's engineering personnel ensure estimates are based on current mine plans, incorporate the most recent drilling and lab data, properly reflect changes in permitting status, consider known encumbrances, and are consistent with operating knowledge and expectations in terms of mining methods, recovery rates, minimum seam heights or maximum strip ratios, and saleable qualities. The Company's operations support personnel endeavor to ensure that estimates are prepared in accordance with applicable rules and regulations, that rationale for changes in estimates from prior years are reasonable and supportable, and that cash flow projections are based on reasonable and supportable assumptions with respect to forecasted production rates, coal pricing, and operating and capital costs.

The Company's drilling, sample preparation and laboratory analysis are conducted in accordance with internal policies and procedures. For example, core drilling is conducted by reputable third-party drillers and core samples are tagged. Laboratory testing is performed by American National Standards Institute ("ANSI") certified laboratories and samples are analyzed in accordance with procedures defined under American Society for Testing and Materials ("ASTM") standards. Core drilling and laboratory testing results are logged into a database with restricted access. In addition, the Company's qualified person performs independent data verification procedures to ensure data is of sufficient quantity and reliability to reasonably support the coal reserve and resource estimates.

Coal reserve and resource amounts are estimates and as estimates have inherent risks due to data accuracy, uncertainty from geologic interpretation, mine plan assumptions, uncontrolled property rights and permit availability, uncertainty with respect to future market supply and demand, and changes in laws and regulations. The Company's current coal reserves and resource estimates are based on the best information available and are subject to re-assessment when conditions change. Also refer to Item 1A. Risk Factors for further discussion of risks associated with the estimates of the Company's reserves and resources.

The following map shows the locations of our material mining properties and corporate headquarters:



Item 3. Legal Proceedings

For a description of the Company's legal proceedings, refer to Note 21, part (d), to the Consolidated Financial Statements, which is incorporated herein by 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 on Form 10-K.

Part II

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

Upon the consummation of the transactions contemplated by the Merger Agreement, we began trading on the New York Stock Exchange under the ticker "CTRA" on November 9, 2018. Following the effectiveness of our name change on February 1, 2021, our ticker symbol on the New York Stock Exchange changed from "CTRA" to "AMR" effective on February 4, 2021.

As of December 31, 2023, there were 86 registered holders of record of our common stock. The transfer agent and registrar for our common stock is Computershare Trust Company, N.A. Our common stock is registered by book-entry only.

The section of our Proxy Statement entitled "Stock Performance Graph" is incorporated herein by reference. For information on securities authorized for issuance under our equity compensation plans, see "Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters."

Dividend Policy

Pursuant to the dividend policy adopted by the Board on May 3, 2022, the Board declared quarterly cash dividends on the Company's common stock during the years ended December 31, 2023 and 2022. The holders of the Company's common stock are entitled to receive such dividends, if any, when they are declared by the Board. The decision to declare and pay cash dividends will be made by the Board and will depend on the Company's earnings, financial condition and other relevant factors. On August 2, 2023, the Board determined to end the Company's fixed dividend program following the quarterly dividend declared and paid in the fourth quarter of 2023. Refer to Note 7 for further information related to the Company's dividend program.

Repurchase of Common Stock

The following table summarizes information about shares of common stock that were repurchased during the fourth quarter of 2023.

	Total Number of Shares Purchased ⁽¹⁾	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs ⁽²⁾	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (In thousands) ⁽²⁾⁽³⁾⁽⁴⁾
October 1, 2023 through October 31, 2023	132,460	\$ 232.02	132,460	\$ 626,717
November 1, 2023 through November 30, 2023	264,425	\$ 253.67	264,425	\$ 559,639
December 1, 2023 through December 31, 2023	124,118	\$ 318.41	101,989	\$ 527,619
	<u>521,003</u>		<u>498,874</u>	

⁽¹⁾ Includes 22,129 common shares repurchased from employees to satisfy the employees' statutory tax withholdings upon the vesting of stock grants. Shares that are repurchased to satisfy the employees' statutory tax withholdings are recorded in treasury stock at cost.

⁽²⁾ On February 21, 2023 and October 31, 2023, the Board approved increases to the existing common share repurchase program adopted March 4, 2022, bringing the total authorization to repurchase the Company's stock to \$1.2 billion and \$1.5 billion, respectively. Refer to Note 7 for additional information.

⁽³⁾ The Company adopted a capital return program in 2019, including a stock repurchase plan with no expiration date that permitted the Company to repurchase up to an aggregate amount of \$100 million of the Company's common stock. The Company suspended this stock repurchase plan on October 1, 2019 and does not currently intend to make further repurchases under it.

⁽⁴⁾ We cannot estimate the number of shares that will be repurchased because decisions to purchase are subject to market and business conditions, levels of available liquidity, our cash needs, restrictions under agreements or obligations, legal or regulatory requirements or restrictions, and other relevant factors. This amount does not include stock repurchase related fees and excise taxes.

Item 6. [Reserved]

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

The following discussion and analysis provides a narrative of our results of operations and financial condition for the years ended December 31, 2023 and 2022. The following discussion and analysis should be read in conjunction with our Consolidated Financial Statements and related notes and the risk factors included elsewhere in this Annual Report on Form 10-K. For discussion on results of operations and financial condition pertaining to 2021 and year-over-year comparisons between 2022 and 2021, refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2022.

The following discussion includes forward-looking statements about our business, financial condition and results of operations, including discussions about management's expectations for our business. These statements represent projections, beliefs and expectations based on current circumstances and conditions and in light of recent events and trends, and you should not construe these statements either as assurances of performance or as promises of a given course of action. Instead, various known and unknown factors are likely to cause our actual performance and management's actions to vary, and the results of these variances may be both material and adverse. See "Cautionary Statement Regarding Forward-Looking Statements" and "Item 1A. Risk Factors."

Market Overview

Throughout 2023, metallurgical coal markets generally showed strength with periods of volatility in the face of economic pressures, geopolitical uncertainty, and global recessionary fears.

Macroeconomic conditions around the world remain inconsistent, with some economies, like the United States, exhibiting continued resilience to these external pressures, while others, like the European Union, having experienced a significant downturn. While central bankers in the United States and Europe are expected to lower interest rates within the 2024 calendar year in response to easing inflation, uncertainty remains regarding when those actions may be taken and how quickly they may impact overall economic conditions. Organizations such as the International Monetary Fund and The World Bank have issued muted expectations about global growth prospects for 2024-2025, citing a slower-than-historical-average pace of expansion and downside risks related to geopolitical shocks, supply disruptions, or prolonged tight monetary conditions.

Geopolitical strife—namely the Russian war in Ukraine and the violence in the Middle East—has impacted coal markets by upending natural trade flows and, at times, causing shipping delays due to violence stemming from these conflicts. Continued volatility in metallurgical markets is possible as these macroeconomic and geopolitical circumstances evolve.

Metallurgical coal indices ended the fourth quarter within a few percentage points of where they started in October 2023, with the U.S. East Coast High Volatile B index representing the largest move, an increase of 6%, of the four indices Alpha closely monitors. The Australian Premium Low Volatile index decreased from \$333.00 per metric ton at the start of the fourth quarter to \$323.75 metric ton at the end of December. The U.S. East Coast Low Volatile index increased from \$258.00 per metric ton at the beginning of October to \$268.00 per metric ton at the end of December. The U.S. East Coast High Volatile A index moved from \$288.00 per metric ton at the start of the fourth quarter to \$281.00 per metric ton at quarter close, and the U.S. East Coast High Volatile B index increased from \$238.00 per metric ton to \$252.00 per metric ton at the end of the year. Since then, all four indices have softened. The Australian Premium Low Volatile declined from its quarter-close level to \$315.00 per metric ton on February 15, 2024. The U.S. East Coast indices of Low Volatile, High Volatile A and High Volatile B measured \$265.00, \$262.00, and \$221.00 per ton, respectively, as of the same date.

The world manufacturing Purchasing Managers' Index ("PMI") increased to 50.0 in January 2024, up from 49.0 in December 2023 and breaking a 16-month stretch of below-50.0 contractionary levels. India, an important market for Alpha, recorded January 2024 PMI of 56.5, up from 54.9 in December 2023. PMI data for the United States rose to 50.7 in January 2024, up from a December 2023 level of 47.9, marking the strongest improvement in operating conditions since September 2022. Brazilian PMI also progressed from its December 2023 level of 48.4, with the January 2024 PMI of 52.8 representing an 18-month high for the country's manufacturing economy. China's headline PMI was unchanged from December 2023 to January 2024, coming in at 50.8. While still firmly in contractionary territory, Europe's PMI data show positive momentum, with the January 2024 manufacturing PMI hitting a 10-month high of 46.6, up significantly from 44.4 in December 2023.

As compiled by the World Steel Association ("WSA"), December 2023 global crude steel production of 135.7 million metric tons from 71 countries represented a decrease of 5.3% in comparison to the year-ago period. The largest steel-producing country, China, produced 67.4 million metric tons in December 2023, 14.9% less than it produced in December 2022. The next largest producer, India, posted an increased December 2023 production level of 12.1 million metric tons, up 9.5% from its December 2022 level. Crude steel production in the United States of 6.8 million metric tons in December 2023 represented an

increase of 7.6% from the year-ago period. South Korea produced 5.4 million metric tons of steel in December 2023, an increase of 2.7% over production from December 2022. Turkey and Iran produced 3.2 million metric tons and 2.9 million metric tons in December 2023, which represented the two largest year-over-year percentage increases (21.2% and 12.1%, respectively) among the top ten steel-producing countries. In terms of regional analysis, December 2023 crude steel production represented an increase against the year-ago period for all reporting regions but the Asia and Oceania region, which contains both India and China, and South America. Asia and Oceania produced 96.4 million metric tons of crude steel for the month, a 9.7% decrease from December 2022, while South America's 3.2 million metric tons was a 3.2% decrease from December 2022.

The American Iron and Steel Institute's capacity utilization rate for U.S. steel mills was 77.0% for the week ending February 10, 2024. This is lower than the year-ago period when the capacity utilization rate was 80.5%.

In the seaborne thermal market, the API2 index started the fourth quarter at \$124.85 per metric ton and decreased to \$103.85 per metric ton at the end of December 2023.

Business Overview

We are a Tennessee-based mining company with operations across Virginia and West Virginia. With customers across the globe, high-quality reserves and significant port capacity, we are a leading supplier of metallurgical coal products to the steel industry. We operate high-quality, cost-competitive coal mines across the CAPP coal basin. As of December 31, 2023, our operations consisted of twenty-two active mines and nine coal preparation and load-out facilities, with approximately 4,160 employees. We produce, process, and sell met coal and thermal coal. We also sell coal produced by others, some of which is processed and/or blended with coal produced from our mines prior to resale, with the remainder purchased for resale. As of December 31, 2023, we had 316.0 million tons of reserves, which included 303.0 million tons of proven and probable metallurgical reserves and 12.9 million tons of proven and probable thermal reserves.

We began operations on July 26, 2016, with mining operations in NAPP, CAPP, and the PRB. Through the Acquisition, we acquired a significant reserve base. We also acquired Alpha Natural Resources Inc.'s 40.6% interest in the DTA coal export terminal in Newport News, Virginia, and on March 31, 2017, we acquired a portion of another partner's ownership stake and increased our interest to 65.0%. We merged with Alpha Natural Resources Holdings, Inc. and ANR, Inc. on November 9, 2018.

On December 8, 2017, we closed a transaction with Blackjewel to sell our Western Mines located in the PRB, Wyoming, along with related coal reserves, equipment, infrastructure and other real properties (our former PRB operations). On October 4, 2019, we closed on the ESM Transaction in connection with Blackjewel's subsequent bankruptcy filing. On May 29, 2020, certain of our subsidiaries (Contura Coal West, LLC and Contura Wyoming Land, LLC), one of which held the mining permits for the Western Mines, were merged with certain subsidiaries of ESM to become wholly-owned subsidiaries of ESM and to complete the permit transfer process in connection with the ESM Transaction.

On December 10, 2020, we closed on a transaction with Iron Senergy Holdings, LLC, to sell our thermal coal mining operations located in Pennsylvania consisting primarily of our Cumberland mining complex and related property (our former NAPP operations). The disposition of our former NAPP operations accelerated our strategic exit from thermal coal production to shift our focus toward met coal production.

For the years ended December 31, 2023 and 2022, sales of met coal were 15.3 million tons and 14.2 million tons, respectively, and accounted for approximately 90% and 87%, respectively, of our coal sales volume. Sales of thermal coal were 1.8 million tons and 2.2 million tons, respectively, and accounted for approximately 10% and 13%, respectively, of our coal sales volume.

Our sales of met coal were made primarily to steel companies in the northeastern and midwestern regions of the United States and in several countries in Asia, Europe, and the Americas. Our sales of thermal coal were made primarily to large utilities and industrial customers both in the United States and across the world. For the years ended December 31, 2023 and 2022 approximately 74% and 81%, respectively, of our coal revenues were derived from coal sales made to customers outside the United States.

In addition, we generate other revenues from equipment sales, rentals, terminal and processing fees, coal and environmental analysis fees, royalties and the sale of natural gas. We also record freight and handling fulfillment revenue within coal revenues for freight and handling services provided in delivering coal to certain customers, which are a component of the contractual selling price.

As of December 31, 2023, we have one reportable segment: Met. Our Met segment operations consist of high-quality met coal mines, including Deep Mine 41, Road Fork 52, Black Eagle, and Lynn Branch. The coal produced by our Met segment operations is predominantly met coal with some amounts of thermal coal being produced as a byproduct of mining. In addition to the one reportable segment, our All Other category includes general corporate overhead and corporate assets and liabilities, our former CAPP - Thermal operations consisting of one preparation plant in West Virginia, and the elimination of certain intercompany activity, as well as expenses associated with certain idled/closed mines. Refer to Notes 22 and 23 for additional disclosures on our reportable segment, geographic areas, and export coal revenue information.

As discussed in the “Market Overview” presented above, monetary tightening in the United States and Europe, weak economic conditions across the globe, and geopolitical unrest from the ongoing war between Russia and Ukraine and violence in the Middle East influenced metallurgical coal markets in 2023. Our year ended December 31, 2023 results of operations were impacted by volatility in coal indices stemming from these factors.

Other Business Developments

During 2023, development was completed and production began at our Rolling Thunder and Checkmate Powellton mines within our Power Mountain and Elk Run mining complexes, respectively, which produce High-Vol. B quality met coal from the Powellton coal seam.

In August 2023, we completed our transition to a pure-play metallurgical producer with the closure of Slabcamp, which was our last remaining thermal mine.

In the first quarter of 2023, we completed a series of transactions to acquire a number of coal trucks and related equipment and facilities to secure trucking services for our operations. In December 2022, we purchased substantially all of the assets of a mining equipment component manufacturing and rebuild business to help secure the supply of certain underground mining equipment parts needed for our operations. Refer to Note 2 for additional information.

Factors Affecting Our Results of Operations

Sales Agreements

We manage our commodity price risk for coal sales through the use of coal supply agreements. As of February 14, 2024, we had sales commitments for 2024 as follows:

	Tons	% Priced	Average Realized Price per Ton
Met - Domestic			\$161.63
Met - Export			\$196.05
Met Total	16.0 million	35 %	\$171.33
Thermal	1.1 million	100 %	\$77.14
Met Segment	17.1 million	40 %	\$154.68

Realized Pricing. Our realized price per ton of coal is influenced by many factors that vary by region, including (i) coal quality, which includes energy (heat content), sulfur, ash, volatile matter and moisture content; (ii) differences in market conventions concerning transportation costs and volume measurement; and (iii) regional supply and demand.

- **Coal Quality.** The energy content or heat value of thermal coal is a significant factor influencing coal prices as higher energy coal is more desirable to consumers and typically commands a higher price in the market. The heat value of coal is commonly measured in British thermal units or the amount of heat needed to raise the temperature of one pound of water by one-degree Fahrenheit. Coal from the Eastern and Midwest regions of the United States tends to have a higher heat value than coal found in the western United States. Coal volatility is a significant factor influencing met coal pricing as coal with a lower volatility has historically been more highly valued and typically commands a higher price in the market. The volatility refers to the loss in mass, less moisture, when coal is heated in the absence of air. The volatility of met coal determines the percentage of feed coal that becomes coke, known as coke yield, with lower volatility producing a higher coke yield.
- **Market Conventions.** Coal sales contracts are priced according to conventions specific to the market into which such coal is to be sold. Our domestic sales contracts are typically priced free on board (“FOB”) at our mines and on a short

ton basis. Our international sales contracts are typically priced FOB at the shipping port from which such coal is delivered and on a metric ton basis. Accordingly, for international sales contracts, we typically bear the cost of transportation from our mines to the applicable outbound shipping port, and our coal sales realization per ton calculation reflects the conversion of such tonnage from metric tons into short tons, as well as the elimination of the freight and handling fulfillment component of coal sales revenue. In addition, for domestic sales contracts, as customers typically bear the cost of transportation from our mines, our operations located further away from the end user of the coal may command lower prices.

- **Regional Supply and Demand.** Our realized price per ton is influenced by market forces of the regional market into which such coal is to be sold. Market pricing may vary according to region and lead to different discounts or premiums to the most directly comparable benchmark price for such coal product.

Costs. Our results of operations are dependent upon our ability to maximize productivity and control costs. Our primary expenses are for operating supply costs, repair and maintenance expenditures, cost of purchased coal, royalties, wages and benefits, freight and handling costs and taxes incurred in selling our coal. The principal goods and services we use in our operations include maintenance and repair parts and services, electricity, fuel, roof control and support items, explosives, tires, conveyance structure, ventilation supplies and lubricants. Our management strives to aggressively control costs and improve operating performance to mitigate external cost pressures. We experience volatility in operating costs related to fuel, explosives, steel, tires, contract services and healthcare, among others, and take measures to mitigate the increases in these costs at all operations. We have a centralized sourcing group for major supplier contract negotiation and administration, for the negotiation and purchase of major capital goods, and to support the business units. We promote competition between suppliers and seek to develop relationships with suppliers that focus on lowering our costs. We seek suppliers who identify and concentrate on implementing continuous improvement opportunities within their area of expertise. To the extent upward pressure on costs exceeds our ability to realize sales increases, or if we experience unanticipated operating or transportation difficulties, our operating margins would be negatively impacted. We may also experience difficult geologic conditions, delays in obtaining permits, labor shortages, unforeseen equipment problems, and unexpected shortages of critical materials such as tires, fuel and explosives that may result in adverse cost increases and limit our ability to produce at forecasted levels.

Results of Operations

Our results of operations for the years ended December 31, 2023 and 2022 are discussed in these “Results of Operations” presented below.

Year Ended December 31, 2023 Compared to the Year Ended December 31, 2022

Revenues

The following table summarizes information about our revenues during the years ended December 31, 2023 and 2022:

<i>(In thousands, except for per ton data)</i>	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$ or Tons	%
Coal revenues	\$ 3,456,630	\$ 4,092,987	\$ (636,357)	(15.5)%
Other revenues	14,787	8,605	6,182	71.8 %
Total revenues	<u>\$ 3,471,417</u>	<u>\$ 4,101,592</u>	<u>\$ (630,175)</u>	<u>(15.4)%</u>
Tons sold	17,072	16,378	694	4.2 %

Coal revenues. Coal revenues decreased \$636.4 million, or 15.5%, for the year ended December 31, 2023 compared to the prior year period. The decrease was primarily due to a 20.7% reduction in average coal sales realization within our Met segment as pricing moderated from the higher levels experienced during the prior year, partially offset by a 6.9% increase in coal sales volumes. The elevated coal sales pricing environment in the prior year period was driven by increased coal demand, resulting from improved economic activity, coupled with limited supply response. Coal revenues within our All Other category also declined due to the closure of Slabcamp, which was our last remaining thermal mine, in August of 2023. Refer to the “Non-GAAP Coal revenues” section below for further detail on coal revenues for the year ended December 31, 2023 compared to the prior year period.

Cost and Expenses

The following table summarizes information about our costs and expenses during the years ended December 31, 2023 and 2022:

(In thousands)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$	%
Cost of coal sales (exclusive of items shown separately below)	\$ 2,356,138	\$ 2,285,969	\$ 70,169	3.1 %
Depreciation, depletion and amortization	136,869	107,620	29,249	27.2 %
Accretion on asset retirement obligations	25,500	23,765	1,735	7.3 %
Amortization of acquired intangibles, net	8,523	19,498	(10,975)	(56.3)%
Selling, general and administrative expenses (exclusive of depreciation, depletion and amortization shown separately above)	82,390	71,618	10,772	15.0 %
Total other operating loss (income):				
Mark-to-market adjustment for acquisition-related obligations	—	8,880	(8,880)	(100.0)%
Other (income) expense	(1,088)	3,363	(4,451)	(132.4)%
Total costs and expenses	<u>\$ 2,608,332</u>	<u>\$ 2,520,713</u>	<u>\$ 87,619</u>	<u>3.5 %</u>

Cost of coal sales. Cost of coal sales increased \$70.2 million, or 3.1%, for the year ended December 31, 2023 compared to the prior year period as a result of increased costs due to inflationary pressure and increased levels of coal purchases partially offset by lower royalties, taxes, and freight and handling costs due to the lower coal pricing environment.

Depreciation, depletion and amortization. Depreciation, depletion and amortization increased \$29.2 million, or 27.2%, for the year ended December 31, 2023 compared to the prior year period. The increase was primarily due to an increase in capital expenditures.

Amortization of acquired intangibles, net. Amortization of acquired intangibles, net decreased \$11.0 million, or 56.3%, for the year ended December 31, 2023 compared to the prior year period. The decrease was primarily driven by accelerated prior period amortization of certain acquired mine permits as a result of an update to the estimated life of the associated mines.

Selling, general and administrative. Selling, general and administrative expenses increased \$10.8 million, or 15.0%, for the year ended December 31, 2023 compared to the prior year period. This increase was primarily related to increases of \$10.8 million in stock compensation expense and \$1.7 million in wages and benefits expense, partially offset by decreases of \$2.0 million in professional services fees and \$0.7 million in incentive pay.

Mark-to-market adjustment for acquisition-related obligations. The mark-to-market adjustment for acquisition-related obligations was \$8.9 million for the year ended December 31, 2022. As the royalty period for our Contingent Revenue Obligation ended on December 31, 2022, there was no mark-to-market adjustment recorded during the year ended December 31, 2023. Refer to Notes 14 and 16 for additional information on the Contingent Revenue Obligation.

Other (income) expense. Other income increased \$4.5 million, or 132.4%, for the year ended December 31, 2023 compared to the prior year period, primarily due to an increase in income on sale of assets in the current period.

Total Other Expense, Net

The following table summarizes information about our total other expense, net during the years ended December 31, 2023 and 2022:

(In thousands)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$	%
Total other expense, net	\$ (17,626)	\$ (26,129)	\$ 8,503	32.5 %

Total other expense, net decreased \$8.5 million, or 32.5%, for the year ended December 31, 2023 compared to the prior year period, primarily related to decreased interest expense due to a reduction in outstanding debt and increased interest income due to rising interest rates, partially offset by an increase in net periodic benefit costs for pension obligations.

Income Tax Expense

The following table summarizes information about our income tax expense during the years ended December 31, 2023 and 2022:

(In thousands)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$	%
Income tax expense	\$ (123,503)	\$ (106,205)	\$ (17,298)	(16.3)%

Income taxes. Income tax expense of \$123.5 million was recorded for the year ended December 31, 2023 on income before income taxes of \$845.5 million. The effective tax rate differs from the federal statutory rate of 21% primarily due to favorable permanent differences for the percentage depletion allowance and the foreign-derived intangible income deduction.

Income tax expense of \$106.2 million was recorded for the year ended December 31, 2022 on income before income taxes of \$1,554.8 million. The effective tax rate differs from the federal statutory rate of 21% primarily due to the decrease in the valuation allowance and favorable permanent differences for the percentage depletion allowance and the foreign-derived intangible income deduction. Refer to Note 17 for additional information.

Non-GAAP Financial Measures

The discussion below contains “non-GAAP financial measures.” These are financial measures that either exclude or include amounts that are not excluded or included in the most directly comparable measures calculated and presented in accordance with generally accepted accounting principles in the United States (“U.S. GAAP” or “GAAP”). Specifically, we make use of the non-GAAP financial measures “Adjusted EBITDA,” “non-GAAP coal revenues,” “non-GAAP cost of coal sales,” and “non-GAAP coal margin.” We use Adjusted EBITDA to measure the operating performance of our segments and allocate resources to the segments. Adjusted EBITDA does not purport to be an alternative to net income (loss) as a measure of operating performance or any other measure of operating results, financial performance, or liquidity presented in accordance with GAAP. Moreover, this measure is not calculated identically by all companies and therefore may not be comparable to similarly titled measures used by other companies. Adjusted EBITDA is presented because management believes it is a useful indicator of the financial performance of our coal operations. We use non-GAAP coal revenues to present coal revenues generated, excluding freight and handling fulfillment revenues. Non-GAAP coal sales realization per ton for our operations is calculated as non-GAAP coal revenues divided by tons sold. We use non-GAAP cost of coal sales to adjust cost of coal sales to remove freight and handling costs, depreciation, depletion and amortization - production (excluding the depreciation, depletion and amortization related to selling, general and administrative functions), accretion on asset retirement obligations, amortization of acquired intangibles, net, and idled and closed mine costs. Non-GAAP cost of coal sales per ton for our operations is calculated as non-GAAP cost of coal sales divided by tons sold. Non-GAAP coal margin per ton for our coal operations is calculated as non-GAAP coal sales realization per ton for our coal operations less non-GAAP cost of coal sales per ton for our coal operations. The presentation of these measures should not be considered in isolation, or as a substitute for analysis of our results as reported under GAAP.

Management uses non-GAAP financial measures to supplement GAAP results to provide a more complete understanding of the factors and trends affecting the business than GAAP results alone. The definition of these non-GAAP measures may be changed periodically by management to adjust for significant items important to an understanding of operating trends and to adjust for items that may not reflect the trend of future results by excluding transactions that are not indicative of our core operating performance. Furthermore, analogous measures are used by industry analysts to evaluate the Company’s operating performance. Because not all companies use identical calculations, the presentations of these measures may not be comparable to other similarly titled measures of other companies and can differ significantly from company to company depending on long-term strategic decisions regarding capital structure, the tax jurisdictions in which companies operate, capital investments and other factors.

Included below are reconciliations of non-GAAP financial measures to GAAP financial measures.

The following tables summarize certain financial information relating to our coal operations for the years ended December 31, 2023 and 2022:

	Year Ended December 31, 2023		
	Met	All Other	Consolidated
<i>(In thousands, except for per ton data)</i>			
Coal revenues	\$ 3,406,643	\$ 49,987	\$ 3,456,630
Less: Freight and handling fulfillment revenues	(438,783)	(227)	(439,010)
Non-GAAP Coal revenues	\$ 2,967,860	\$ 49,760	\$ 3,017,620
Tons sold	16,543	529	17,072
Non-GAAP Coal sales realization per ton	\$ 179.40	\$ 94.06	\$ 176.76
Cost of coal sales (exclusive of items shown separately below)	\$ 2,303,129	\$ 53,009	\$ 2,356,138
Depreciation, depletion and amortization - production ⁽¹⁾	125,716	9,952	135,668
Accretion on asset retirement obligations	14,886	10,614	25,500
Amortization of acquired intangibles, net	8,523	—	8,523
Total Cost of coal sales	\$ 2,452,254	\$ 73,575	\$ 2,525,829
Less: Freight and handling costs	(438,783)	(227)	(439,010)
Less: Depreciation, depletion and amortization - production ⁽¹⁾	(125,716)	(9,952)	(135,668)
Less: Accretion on asset retirement obligations	(14,886)	(10,614)	(25,500)
Less: Amortization of acquired intangibles, net	(8,523)	—	(8,523)
Less: Idled and closed mine costs	(16,983)	(10,015)	(26,998)
Non-GAAP Cost of coal sales	\$ 1,847,363	\$ 42,767	\$ 1,890,130
Tons sold	16,543	529	17,072
Non-GAAP Cost of coal sales per ton	\$ 111.67	\$ 80.84	\$ 110.72

⁽¹⁾ Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.

	Year Ended December 31, 2023		
	Met	All Other	Consolidated
<i>(In thousands, except for per ton data)</i>			
Coal revenues	\$ 3,406,643	\$ 49,987	\$ 3,456,630
Less: Total Cost of coal sales (per table above)	(2,452,254)	(73,575)	(2,525,829)
GAAP Coal margin	\$ 954,389	\$ (23,588)	\$ 930,801
Tons sold	16,543	529	17,072
GAAP Coal margin per ton	\$ 57.69	\$ (44.59)	\$ 54.52
GAAP Coal margin	\$ 954,389	\$ (23,588)	\$ 930,801
Add: Depreciation, depletion and amortization - production ⁽¹⁾	125,716	9,952	135,668
Add: Accretion on asset retirement obligations	14,886	10,614	25,500
Add: Amortization of acquired intangibles, net	8,523	—	8,523
Add: Idled and closed mine costs	16,983	10,015	26,998
Non-GAAP Coal margin	\$ 1,120,497	\$ 6,993	\$ 1,127,490
Tons sold	16,543	529	17,072
Non-GAAP Coal margin per ton	\$ 67.73	\$ 13.22	\$ 66.04

⁽¹⁾ Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.

	Year Ended December 31, 2022		
	Met	All Other	Consolidated
<i>(In thousands, except for per ton data)</i>			
Coal revenues	\$ 4,018,515	\$ 74,472	\$ 4,092,987
Less: Freight and handling fulfillment revenues	(529,043)	(20)	(529,063)
Non-GAAP Coal revenues	\$ 3,489,472	\$ 74,452	\$ 3,563,924
Tons sold	15,478	900	16,378
Non-GAAP Coal sales realization per ton	\$ 225.45	\$ 82.72	\$ 217.60
Cost of coal sales (exclusive of items shown separately below)	\$ 2,225,771	\$ 60,198	\$ 2,285,969
Depreciation, depletion and amortization - production ⁽¹⁾	100,584	6,036	106,620
Accretion on asset retirement obligations	13,590	10,175	23,765
Amortization of acquired intangibles, net	15,699	3,799	19,498
Total Cost of coal sales	\$ 2,355,644	\$ 80,208	\$ 2,435,852
Less: Freight and handling costs	(529,043)	(20)	(529,063)
Less: Depreciation, depletion and amortization - production ⁽¹⁾	(100,584)	(6,036)	(106,620)
Less: Accretion on asset retirement obligations	(13,590)	(10,175)	(23,765)
Less: Amortization of acquired intangibles, net	(15,699)	(3,799)	(19,498)
Less: Idled and closed mine costs	(21,646)	(6,911)	(28,557)
Non-GAAP Cost of coal sales	\$ 1,675,082	\$ 53,267	\$ 1,728,349
Tons sold	15,478	900	16,378
Non-GAAP Cost of coal sales per ton	\$ 108.22	\$ 59.19	\$ 105.53

⁽¹⁾ Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.

	Year Ended December 31, 2022		
	Met	All Other	Consolidated
<i>(In thousands, except for per ton data)</i>			
Coal revenues	\$ 4,018,515	\$ 74,472	\$ 4,092,987
Less: Total Cost of coal sales (per table above)	(2,355,644)	(80,208)	(2,435,852)
GAAP Coal margin	\$ 1,662,871	\$ (5,736)	\$ 1,657,135
Tons sold	15,478	900	16,378
GAAP Coal margin per ton	\$ 107.43	\$ (6.37)	\$ 101.18
GAAP Coal margin	\$ 1,662,871	\$ (5,736)	\$ 1,657,135
Add: Depreciation, depletion and amortization - production ⁽¹⁾	100,584	6,036	106,620
Add: Accretion on asset retirement obligations	13,590	10,175	23,765
Add: Amortization of acquired intangibles, net	15,699	3,799	19,498
Add: Idled and closed mine costs	21,646	6,911	28,557
Non-GAAP Coal margin	\$ 1,814,390	\$ 21,185	\$ 1,835,575
Tons sold	15,478	900	16,378
Non-GAAP Coal margin per ton	\$ 117.22	\$ 23.54	\$ 112.08

⁽¹⁾ Depreciation, depletion and amortization - production excludes the depreciation, depletion and amortization related to selling, general and administrative functions.

(In thousands, except for per ton data)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$ or Tons	%
Met segment operations:				
Tons sold	16,543	15,478	1,065	6.9 %
Non-GAAP Coal revenues	\$ 2,967,860	\$ 3,489,472	\$ (521,612)	(14.9)%
Non-GAAP Coal sales realization per ton	\$ 179.40	\$ 225.45	\$ (46.05)	(20.4)%
All Other category:				
Tons sold	529	900	(371)	(41.2)%
Non-GAAP Coal revenues	\$ 49,760	\$ 74,452	\$ (24,692)	(33.2)%
Non-GAAP Coal sales realization per ton	\$ 94.06	\$ 82.72	\$ 11.34	13.7 %

Non-GAAP Coal revenues. Met segment operations non-GAAP coal revenues decreased \$521.6 million, or 14.9%, for the year ended December 31, 2023 compared to the prior year period. The decrease was primarily due to a \$46.05, or 20.4%, reduction in average non-GAAP coal sales realization as prices moderated from the higher levels experienced during the prior year period, partially offset by a 6.9% increase in Met coal sales volumes. The elevated coal sales pricing environment in the prior year period was driven by increased coal demand, resulting from improved economic activity, coupled with limited supply response.

All Other category non-GAAP coal revenues decreased \$24.7 million, or 33.2%, for the year ended December 31, 2023 compared to the prior year period primarily due to a decline in coal sales volumes with the closure of Slabcamp, which was our last remaining thermal mine, in August of 2023.

(In thousands, except for per ton data)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$	%
Met segment operations:				
Non-GAAP Cost of coal sales	\$ 1,847,363	\$ 1,675,082	\$ 172,281	10.3 %
Non-GAAP Cost of coal sales per ton	\$ 111.67	\$ 108.22	\$ 3.45	3.2 %
Non-GAAP Coal margin per ton	\$ 67.73	\$ 117.22	\$ (49.49)	(42.2)%
All Other category:				
Non-GAAP Cost of coal sales	\$ 42,767	\$ 53,267	\$ (10,500)	(19.7)%
Non-GAAP Cost of coal sales per ton	\$ 80.84	\$ 59.19	\$ 21.65	36.6 %
Non-GAAP Coal margin per ton	\$ 13.22	\$ 23.54	\$ (10.32)	(43.8)%

Non-GAAP cost of coal sales. Met segment operations non-GAAP cost of coal sales increased \$172.3 million, or 10.3%, for the year ended December 31, 2023 compared to the prior year period. The increase was primarily driven by a 6.9% increase in Met coal sales volumes combined with a 3.2% increase in average non-GAAP cost of coal sales per ton. The increase in average non-GAAP cost of coal sales per ton was primarily driven by inflationary pressures and increased levels of coal purchases, partially offset by lower royalties and taxes as a result of a lower coal pricing environment.

All Other category non-GAAP cost of coal sales decreased \$10.5 million, or 19.7%, for the year ended December 31, 2023 compared to the prior year period primarily due to the closure of Slabcamp, which was our last remaining thermal mine, in August of 2023.

Adjusted EBITDA

The following tables present a reconciliation of net income (loss) to Adjusted EBITDA for the years ended December 31, 2023 and 2022:

(In thousands)	Year Ended December 31, 2023		
	Met	All Other	Consolidated
Net income (loss)	\$ 938,495	\$ (216,539)	\$ 721,956
Interest expense	731	6,192	6,923
Interest income	(644)	(11,289)	(11,933)
Income tax expense	—	123,503	123,503
Depreciation, depletion and amortization	125,716	11,153	136,869
Non-cash stock compensation expense	96	18,921	19,017
Loss on extinguishment of debt	—	2,753	2,753
Accretion on asset retirement obligations	14,886	10,614	25,500
Amortization of acquired intangibles, net	8,523	—	8,523
Adjusted EBITDA	<u>\$ 1,087,803</u>	<u>\$ (54,692)</u>	<u>\$ 1,033,111</u>

(In thousands)	Year Ended December 31, 2022		
	Met	All Other	Consolidated
Net income (loss)	\$ 1,647,104	\$ (198,559)	\$ 1,448,545
Interest expense	202	21,600	21,802
Interest income	(541)	(2,646)	(3,187)
Income tax expense	—	106,205	106,205
Depreciation, depletion and amortization	100,584	7,036	107,620
Non-cash stock compensation expense	4	7,480	7,484
Mark-to-market adjustment - acquisition-related obligations	—	8,880	8,880
Accretion on asset retirement obligations	13,590	10,175	23,765
Amortization of acquired intangibles, net	15,699	3,799	19,498
Adjusted EBITDA	<u>\$ 1,776,642</u>	<u>\$ (36,030)</u>	<u>\$ 1,740,612</u>

The following table summarizes Adjusted EBITDA for our Met segment operations and All Other category:

(In thousands)	Year Ended December 31,		Increase (Decrease)	
	2023	2022	\$	%
Adjusted EBITDA				
Met operations	\$ 1,087,803	\$ 1,776,642	\$ (688,839)	(38.8)%
All Other	(54,692)	(36,030)	(18,662)	(51.8)%
Total	<u>\$ 1,033,111</u>	<u>\$ 1,740,612</u>	<u>\$ (707,501)</u>	<u>(40.6)%</u>

Met segment operations. Adjusted EBITDA decreased \$688.8 million, or 38.8%, for the year ended December 31, 2023 compared to the prior year period. The decrease in Adjusted EBITDA was primarily driven by decreased coal margin and lower non-GAAP coal sales realization per ton in the current period.

All Other category. Adjusted EBITDA decreased \$18.7 million, or 51.8%, for the year ended December 31, 2023 compared to the prior year period. The decrease in Adjusted EBITDA was primarily driven by a decrease in tons sold and decreased coal margin, partially offset by higher non-GAAP coal sales realization per ton in the current period.

Liquidity and Capital Resources

Overview

Our primary sources of liquidity are derived from existing unrestricted cash balances, proceeds from future coal sales, and amounts available under our revolving credit agreement. Our primary capital resource requirements stem from the cost of our coal production and purchases, selling and administrative expenses, taxes, capital expenditures, debt service obligations, reclamation obligations, and collateral requirements.

We believe that cash on hand and cash generated from our operations will be sufficient to meet our working capital, anticipated capital expenditure, income tax, debt service, collateral and reclamation obligations requirements for the next 12 months and the reasonably foreseeable future. We may also use cash in accordance with our share repurchase program. We rely on a number of assumptions in budgeting for our future activities. These include the costs for mine development to sustain capacity of our operating mines, our cash flows from operations, effects of regulation and taxes by governmental agencies, mining technology improvements and reclamation costs. These assumptions are inherently subject to significant business, political, economic, regulatory, environmental and competitive uncertainties, pending and existing climate-related initiatives, contingencies and risks, all of which are difficult to predict and many of which are beyond our control. For example, if the new authorization process for all self-insured coal mine operators is adopted, it would substantially increase the collateral required to secure our self-insured federal black lung obligations. Refer to the DCMWC Reauthorization Process section below for more information. Increased scrutiny of ESG matters specific to the coal sector could negatively influence our ability to raise capital in the future and result in a reduced number of surety and insurance providers. We may need to raise additional funds if market conditions deteriorate, if one or more of our assumptions prove to be incorrect or if we choose to expand our acquisition or development efforts or any other activity more rapidly than we presently anticipate and we may not be able to do so in a timely fashion, on terms acceptable to us, or at all. Additionally, we may elect to raise additional funds before we need them if the conditions for raising capital are favorable. We may seek to sell equity or debt securities or obtain additional bank credit facilities. The sale of equity securities could result in dilution to our stockholders. The incurrence of additional indebtedness could result in increased fixed obligations and additional covenants that could restrict our operations.

Liquidity

The following table summarizes our total liquidity as of December 31, 2023:

<i>(in thousands)</i>	December 31, 2023
Cash and cash equivalents	\$ 268,207
Credit facility availability ⁽¹⁾	94,104
Minimum liquidity requirement	(75,000)
Total liquidity	<u>\$ 287,311</u>

⁽¹⁾ Comprised of our unused commitments available under our New ABL Agreement after considering \$60.9 million of outstanding LCs, subject to limitations described therein.

Cash Collateral

We are required to provide cash collateral to secure our obligations under certain worker's compensation, black lung, reclamation-related obligations, financial payments and other performance obligations, and other operating agreements. Future regulatory changes relating to these obligations could result in increased obligations, additional costs, or additional collateral requirements which could require greater use of alternative sources of funding for this purpose, which would reduce our liquidity. Refer to the DCMWC Reauthorization Process section below for information related to the new authorization process for self-insured coal mine operators being implemented by the U.S. Department of Labor (Division of Coal Mine Workers' Compensation). As of December 31, 2023, we had the following cash collateral on our Consolidated Balance Sheets:

<i>(in thousands)</i>	December 31, 2023
Long-term restricted cash	\$ 115,918
Long-term restricted investments	40,597
Short-term and long-term deposits	5,382
Total cash collateral	<u>\$ 161,897</u>

Off-Balance Sheet Arrangements

We are required to provide financial assurance in order to perform the post-mining reclamation required by our mining permits, pay workers' compensation claims under workers' compensation laws in various states, pay federal black lung benefits, and perform certain other obligations. In order to provide the required financial assurance, we generally use surety bonds for post-mining reclamation and workers' compensation obligations. We also use bank LCs to collateralize certain obligations. As of December 31, 2023, we had the following outstanding surety bonds and LCs:

<i>(in thousands)</i>	December 31, 2023
Surety bonds	\$ 177,109
Letters of credit ⁽¹⁾	\$ 60,896

⁽¹⁾ The LCs outstanding are under the New ABL Agreement dated October 27, 2023.

Refer to Note 21, part (c) for further disclosures on off-balance sheet arrangements.

Debt Financing and Related Transactions

On October 27, 2023, we terminated our existing ABL Agreement and entered into a New ABL Agreement. Under the New ABL Facility, we may borrow cash or obtain LCs, on a revolving basis, in an aggregate amount of up to \$155.0 million. We may request an increase to the capacity of the facility of up to \$75.0 million provided that \$25.0 million may be solely for the purpose of providing additional availability to obtain cash collateralized LCs. Availability under the New ABL Facility is calculated monthly and fluctuates based on qualifying amounts of coal inventory and trade accounts receivable (the "Borrowing Base"). Generally, under the terms of the New ABL Facility, to the extent outstanding borrowings and LC's exceed the Borrowing Base, the specified amount of cash would be restricted and used to collateralize any excess outstanding amounts. The New ABL Facility matures on October 27, 2027.

Refer to Note 13 for additional disclosures on long-term debt.

Acquisition-Related Obligations

During the first quarter of 2023, we paid the final calculated payment pursuant to terms of the Contingent Revenue Obligation. At December 31, 2023, we had no acquisition-related obligations outstanding. Refer to Note 14 for additional disclosures on acquisition-related obligations.

Capital Requirements

Our capital expenditures for the year ended December 31, 2023 were \$245.4 million. We expect to spend between \$210.0 million and \$240.0 million on capital expenditures during 2024. At the midpoint of guidance, this total includes approximately \$171 million in sustaining maintenance capital, approximately \$33 million in planned projects to invest in mine development, and approximately \$21 million in carryover from 2023 due to timing and availability of supplies and contract labor.

Contractual Obligations

The following is a summary of our significant contractual obligations as of December 31, 2023:

<i>(in thousands)</i>	2024	2025	2026	2027	2028	After 2028	Total
Minimum royalties	\$ 14,357	\$ 14,394	\$ 13,160	\$ 11,901	\$ 11,851	\$ 89,025	\$ 154,688
Coal purchase commitments	236,848	—	—	—	—	—	236,848
Unconditional purchase obligations ⁽¹⁾	251,038	66,675	—	—	—	—	317,713
Total	<u>\$ 502,243</u>	<u>\$ 81,069</u>	<u>\$ 13,160</u>	<u>\$ 11,901</u>	<u>\$ 11,851</u>	<u>\$ 89,025</u>	<u>\$ 709,249</u>

⁽¹⁾ Includes contractual commitments related to the purchase of equipment, diesel fuel, and electricity as well as for rail freight and export terminal costs, including approximately \$48.4 million in 2024 for expected DTA funding. See below for further discussion.

Additionally, we have long-term liabilities relating to asset retirement obligations, pension benefits, black lung benefits, postretirement life insurance benefits, and workers' compensation benefits. The table below reflects the estimated undiscounted cash flows for these obligations:

<i>(in thousands)</i>	2024	2025	2026	2027	2028	After 2028	Total
Asset retirement obligation	\$ 39,888	\$ 36,295	\$ 28,783	\$ 37,462	\$ 39,623	\$ 304,521	\$ 486,572
Pension benefit obligation ⁽¹⁾	31,491	31,496	31,392	31,333	31,180	852,913	1,009,805
Black lung benefit obligation	10,687	10,301	10,082	9,937	9,857	177,711	228,575
Postretirement life insurance benefit obligation	613	607	602	601	603	12,922	15,948
Workers' compensation benefit obligation	8,661	5,990	5,162	4,632	4,363	56,898	85,706
Total	<u>\$ 91,340</u>	<u>\$ 84,689</u>	<u>\$ 76,021</u>	<u>\$ 83,965</u>	<u>\$ 85,626</u>	<u>\$ 1,404,965</u>	<u>\$ 1,826,606</u>

⁽¹⁾ The estimated undiscounted cash flows are expected to be paid from the defined benefit pension plan assets held within the defined benefit pension plan trust. Refer to Note 18 for further disclosures related to this obligation.

Business Updates

On August 3, 2023, S&P Global Ratings upgraded its issuer credit rating on the Company to B+ from B based on the strength of our balance sheet. The rating outlook was noted as stable. On November 6, 2023, S&P Global Ratings affirmed our B+ issuer credit rating and stable rating outlook on the New ABL Facility. On July 18, 2023, Moody's Investors Service upgraded our Corporate Family Rating to B1 from B2, upgraded our Probability of Default Rating to B1-PD from B2-PD, and affirmed our B1 rating on the ABL Facility. Our Speculative Grade Liquidity Rating remained unchanged at SGL-2. The rating outlook was revised to stable from positive. On November 3, 2023, Moody's Investors Service maintained our B1 Corporate Family Rating, B1-PD Probability of Default Rating, and SGL-2 Speculative Grade Liquidity Rating, and affirmed our B1 rating on the New ABL Facility. Should we receive any negative outlook ratings in the future, such negative outlook ratings would result in potential liquidity risks for us, including the risks of declines in our stock value, declines in our cash and cash equivalents, less availability and higher costs of additional credit, and requests for additional collateral by surety providers.

We own a 65.0% interest in DTA, a coal export terminal in Newport News, Virginia. DTA provides us with the ability to fulfill a broad range of customer coal quality requirements through coal blending, while also providing storage capacity and transportation flexibility. DTA is in need of capital investment to maximize functionality and minimize downtime due to mechanical issues. Under the terms of our partnership related agreements with respect to our investment in DTA, we are required to fund our proportionate share of DTA's ongoing operating and capital costs. Beyond our share of routine operating costs, we expect we will invest up to an incremental \$25.0 million per year for infrastructure and equipment upgrades at DTA over the next 6 years. Our 2024 funding of DTA (including routine operating and capital costs and infrastructure and equipment upgrades) is expected to total approximately \$48.4 million.

We continually strive to enhance our capital structure and financial flexibility. As opportunities arise, we will continue to consider the possibility of refinancing or repayment of any outstanding debt and amendment of our credit facility, and may consider the sale of other assets or businesses, and such other measures as we believe circumstances warrant. We may decide to pursue or not pursue these opportunities at any time. Access to additional funds from liquidity-generating transactions or other sources of external financing is subject to market conditions and certain limitations, including our credit rating and covenant restrictions in our credit facilities.

As a regular part of our business, we review opportunities for, and engage in discussions and negotiations concerning, the acquisition or disposition of coal mining and related infrastructure assets and interests in coal mining companies, and acquisitions or dispositions of, or combinations or other strategic transactions involving companies with coal mining or other energy assets. When we believe that these opportunities are consistent with our strategic plans and our acquisition or disposition criteria, we will make bids or proposals and/or enter into letters of intent and other similar agreements. These bids or proposals, which may be binding or non-binding, are customarily subject to a variety of conditions and usually permit us to terminate the discussions and any related agreement if, among other things, we are not satisfied with the results of due diligence. Any acquisition opportunities we pursue could materially affect our liquidity and capital resources and may require us to incur indebtedness, seek equity capital or both. There can be no assurance that additional financing will be available on terms acceptable to us, or at all.

Income Taxes

During the year ended December 31, 2023, we paid federal and state income taxes of \$79.2 million. Refer to Note 17 for further income tax disclosures.

Pension Plan

We sponsored three qualified non-contributory pension plans (“Pension Plans”) which covered certain salaried and non-union hourly employees. Effective as of December 31, 2023, the assets and liabilities of the Pension Plans were merged into one qualified non-contributory defined benefit pension plan (“Pension Plan”). Participants accrued benefits either based on certain formulas, the participant’s compensation prior to retirement or plan specified amounts for each year of service. Benefits are frozen under the Pension Plan. Annual funding contributions to the Pension Plan are made as recommended by consulting actuaries based upon the Employee Retirement Income Security Act of 1974, as amended (“ERISA”) funding standards. Funding decisions also consider certain funded status thresholds defined by the Pension Protection Act of 2006. We contributed \$25.0 million to the Pension Plan in 2023 and expect to contribute \$25.0 million in 2024, including amounts above the estimated minimum required contributions for the respective plan years. Refer to Note 18 for further disclosures related to the Pension Plan and the related obligation.

DCMWC Reauthorization Process

In July 2019, the U.S. Department of Labor (Division of Coal Mine Workers’ Compensation or “DCMWC”) began implementing a new authorization process for all self-insured coal mine operators. As requested by DCMWC, we filed an application and supporting documentation for reauthorization to self-insure certain of our black lung obligations in October 2019. As a result of this application, the DCMWC notified us in a letter dated February 21, 2020 that we were reauthorized to self-insure certain of our black lung obligations for a period of one-year from February 21, 2020. The DCMWC reauthorization was contingent, however, upon us providing collateral of \$65.7 million to secure certain of our black lung obligations. This collateral requirement, which the DCMWC advises represents 70% of our estimated future liability according to the DCMWC’s estimation methodology, would have been an increase of approximately 2,400% from the approximately \$2.6 million in collateral which we (previously by Alpha Natural Resources Inc. prior to the Merger) have provided since 2016 to secure these self-insured black lung obligations. Future liability has not previously been estimated by the DCMWC in connection with the reauthorization process but is now being considered as part of its new collateral-setting methodology.

The reauthorization process provided us with the right to appeal the security determination in writing within 30 days of the date of the notification, which appeal period the DCMWC agreed to extend to May 22, 2020, and we exercised this right of appeal. We strongly disagree with the DCMWC’s substantially higher collateral determination and the methodology through which the calculation was derived. In February 2021, the U.S. Department of Labor (“DOL”) withdrew its Federal Register notice seeking comments on its bulletin describing its new method of calculating collateral requirements. The DOL removed the bulletin from its website in May 2021. On February 10, 2022, a telephone conference was held with DCMWC and DOL decision makers wherein we presented facts and arguments in support of our appeal. No ruling has been made on the appeal, but during the call we indicated that we would be willing to allocate an additional \$10.0 million in collateral. If our appeal is unsuccessful, we may be required to provide additional LCs in order to receive self-insurance reauthorization from the DCMWC or insure these black lung obligations through a third-party provider, which would likely also require us to provide additional collateral. In January 2023, the DOL proposed for public comment new regulations which, if adopted, would substantially increase the collateral required to secure self-insured federal black lung obligations. Under the proposed 120% minimum collateral requirement, we estimate we could be required to provide approximately \$80.0 million to \$100.0 million of collateral to secure certain of our black lung obligations. The DOL has indicated that it expects that some form of these new regulations could go into effect in the first quarter or early second quarter of 2024. A significant increase in these collateral obligations could have a materially adverse effect on our liquidity.

Share Repurchase Program

Refer to Note 7 and “Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities” for information on the share repurchase program and the shares repurchased during the current period.

Dividend Program

Refer to Note 7 for information related to our dividend program.

Cash Flows

Cash, cash equivalents, and restricted cash increased by \$28.7 million and \$172.8 million and decreased by \$62.0 million over the years ended December 31, 2023, 2022, and 2021, respectively. The net change in cash, cash equivalents, and restricted cash was attributable to the following:

	Year Ended December 31,		
	2023	2022	2021
<i>Cash flows (in thousands):</i>			
Net cash provided by operating activities	\$ 851,159	\$ 1,484,005	\$ 174,943
Net cash used in investing activities	(166,000)	(329,357)	(89,855)
Net cash used in financing activities	(656,428)	(981,868)	(147,045)
Net increase (decrease) in cash and cash equivalents and restricted cash	\$ 28,731	\$ 172,780	\$ (61,957)

Operating Activities. The decrease in net cash provided by operating activities for the year ended December 31, 2023 compared to the year ended December 31, 2022 was primarily attributable to lower coal sale realizations, increased operating costs due to inflationary pressures, and increased levels of coal purchases, partially offset by lower royalties and taxes as a result of the lower coal pricing environment.

The increase in net cash provided by operating activities for the year ended December 31, 2022 compared to the year ended December 31, 2021 was primarily attributable to the improvement in our results from operations as discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Results of Operations” in Part II, Item 7 of our Annual Report on Form 10-K for the year ended December 31, 2022, primarily offset by an increase in deposits related to our January 2023 dividend payment and payments on operating liabilities.

Investing Activities. The decrease in net cash used in investing activities for the year ended December 31, 2023 compared to the year ended December 31, 2022 was primarily driven by increased cash flows from net sales and maturities of investment securities, partially offset by increased capital expenditures.

The increase in net cash used in investing activities for the year ended December 31, 2022 compared to the year ended December 31, 2021 was primarily driven by increases in net purchases of investment securities and capital expenditures. In addition, we purchased substantially all of the assets of a mining equipment component manufacturing and rebuilding business (refer to Note 2 for further information).

Financing Activities. The decrease in net cash used in financing activities for the year ended December 31, 2023 compared to the year ended December 31, 2022 was primarily driven by decreases in principal repayments of long-term debt as a result of the payoff of the Term Loan Credit Facility in the prior year period, partially offset by increases in dividend and dividend equivalents paid which included the payment of a one time dividend of \$5.00 per share in 2023 and common stock repurchases under our share repurchase program during the current period.

The increase in net cash used in financing activities for the year ended December 31, 2022 compared to the year ended December 31, 2021 was primarily driven by the voluntary prepayments of our remaining outstanding principal borrowings under the Term Loan Credit Facility and the common stock repurchases under our share repurchase program during 2022.

Analysis of Material Debt Covenants

We are in compliance with all covenants under the New ABL Agreement, as of December 31, 2023, including the requirement that we maintain minimum liquidity, as defined in the New ABL Agreement, of \$75.0 million. A breach of the covenants in the New ABL Agreement could result in a default under the terms of such agreement, and the respective lenders could then elect to declare any amounts borrowed due and payable and require outstanding LCs to be cash collateralized. In addition, a default under the terms of would inhibit our ability to make certain restricted payments, as defined in the New ABL Agreement, including the Company’s ability to repurchase shares of the Company’s common stock.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with GAAP requires management to make estimates and assumptions that affect reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets

and liabilities. We base our estimates on historical experience and on various other factors and assumptions, including the current economic environment, that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. We evaluate our estimates and assumptions on an ongoing basis and adjust such estimates and assumptions as facts and circumstances require. Foreign currency and energy markets, and fluctuations in demand for steel products have combined to increase the uncertainty inherent in such estimates and assumptions. As future events and their effects cannot be determined with precision, actual results may differ significantly from these estimates. Changes in these estimates resulting from continuing changes in the economic environment will be reflected in the financial statements in future periods.

Reclamation. Our asset retirement obligations arise from the federal Surface Mining Control and Reclamation Act of 1977 and similar state statutes, which require that mine property be restored in accordance with specified standards and an approved reclamation plan. Significant reclamation activities include reclaiming refuse and slurry ponds, reclaiming the pit and support acreage at surface mines, sealing portals at deep mines, and the treatment of water. We determine the future cash flows necessary to satisfy our reclamation obligations on a permit-by-permit basis based upon current permit requirements and various estimates and assumptions, including estimates of disturbed acreage, cost estimates, and assumptions regarding productivity. We are also faced with increasingly stringent environmental regulation, much of which is beyond our control, which could increase our costs and materially increase our asset retirement obligations. Estimates of disturbed acreage are determined based on approved mining plans and related engineering data. Cost estimates are based upon third-party costs. Productivity assumptions are based on historical experience with the equipment that is expected to be utilized in the reclamation activities. Our asset retirement obligations are initially recorded at fair value. In order to determine fair value, we use assumptions including a discount rate and third-party margin. Each is discussed further below:

- *Discount Rate.* Asset retirement obligations are initially recorded at fair value. We utilize discounted cash flow techniques to estimate the fair value of our obligations. We base our discount rate on the rates of treasury bonds with maturities similar to expected mine lives and adjust for our credit standing as necessary after considering funding and assurance provisions. Changes in our credit standing could have a material impact on our asset retirement obligations.
- *Third-Party Margin.* The measurement of an obligation at fair value is based upon the amount a third party would demand to perform the obligation. Because we plan to perform a significant amount of the reclamation activities with internal resources, a third-party margin was added to the estimated costs of these activities. This margin was estimated based upon our historical experience with contractors performing similar types of reclamation activities. The inclusion of this margin will result in a recorded obligation that is greater than our estimates of our cost to perform the reclamation activities. If our cost estimates are accurate, the excess of the recorded obligation over the cost incurred to perform the work will be recorded as a reduction to Depreciation, depletion and amortization within our Consolidated Statements of Operations at the time that reclamation work is completed.

On at least an annual basis, we review our reclamation liabilities and make necessary adjustments for permit changes as granted by state authorities, additional costs resulting from accelerated mine closures, and revisions to cost estimates and productivity assumptions to reflect current experience and updated plans. At December 31, 2023, we had recorded asset retirement obligation liabilities of \$205.4 million, including amounts reported as current. While the precise amount of these future costs cannot be determined with certainty, as of December 31, 2023, we estimate that the aggregate undiscounted cost of final mine closures is approximately \$486.6 million. Refer to Note 15 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for reclamation disclosures including a table summarizing the changes in asset retirement obligations for the years ended December 31, 2023 and 2022.

Retirement Plans. We had three non-contributory defined benefit retirement Pension Plans covering certain of our salaried and non-union hourly employees, all of which were frozen. Effective as of December 31, 2023, the assets and liabilities of the Pension Plans were merged into one qualified non-contributory defined benefit Pension Plan. Benefits are based on either the employee's compensation prior to retirement or stated amounts for each year of service with us. Funding of the Pension Plan is in accordance with requirements of ERISA, and our contributions can be deducted for federal income tax purposes. We contributed \$25.0 million to our Pension Plan for the year ended December 31, 2023. For the year ended December 31, 2023, we recorded a net periodic benefit cost of \$2.7 million for our Pension Plan and have recorded a net obligation of \$101.9 million which is net of assets of \$376.5 million. Refer to Note 18 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for disclosures summarizing the changes in this projected benefit obligation for the years ended December 31, 2023 and 2022.

The calculation of the net periodic benefit expense (credit) and projected benefit obligation associated with our Pension Plan requires the use of a number of assumptions, which are used by our independent actuaries to make the underlying calculations. Refer to Note 18 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-

K for a summary of these assumptions and additional disclosures related to our Pension Plan. Changes in these assumptions can result in different net periodic benefit expense and liability amounts, and actual experience can differ from the assumptions.

- The expected long-term rate of return on plan assets is an assumption of the rate of return on plan assets reflecting the average rate of earnings expected on the funds invested or to be invested to provide for the benefits included in the projected benefit obligation. We establish the expected long-term rate of return on plan assets at the beginning of each fiscal year based upon historical returns and projected returns on the underlying mix of invested assets. The Pension Plan investment targets are 58% equity securities and 42% fixed income funds (refer to Note 18 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for additional disclosures on this assumption). Investments are rebalanced on a periodic basis to stay within these targeted guidelines. The expected long-term rate of return on plan assets assumption used to determine net periodic benefit expense was 6.20% for the year ended December 31, 2023. The expected long-term rate of return on plan assets assumption to be used in 2024 is expected to be 6.20%. Any difference between the actual experience and the assumed experience is deferred as an unrecognized actuarial gain or loss and amortized into expense in future periods.
- The discount rate represents our estimate of the interest rate at which pension benefits could be effectively settled. Assumed discount rates are used in the measurement of the projected and accumulated benefit obligations and the interest cost component of the net periodic benefit expense. In estimating that rate, we use rates of return on high quality, fixed income investments. The weighted average discount rate used to determine the pension benefit obligation was 5.10% for the year ended December 31, 2023. The differences resulting from actual versus assumed discount rates are amortized into pension net periodic benefit expense (credit) over the remaining average life of the active plan participants. A one percentage-point increase in the discount rate would increase the net periodic pension cost for the year ended December 31, 2023 by approximately \$1.7 million and decrease the projected benefit obligation as of December 31, 2023 by approximately \$48.7 million. The corresponding effects of a one percentage-point decrease in discount rate would decrease the net periodic pension cost for the year ended December 31, 2023 by approximately \$2.2 million and increase the projected benefit obligation as of December 31, 2023 by approximately \$59.1 million.

Coal Workers' Pneumoconiosis. We are required by federal and state statutes to provide benefits to employees for awards related to coal workers' pneumoconiosis disease (black lung). Certain of our subsidiaries are insured for black lung benefit obligations by a third-party insurance provider and certain subsidiaries are self-insured for black lung benefit obligations and may fund certain benefit payments through a Section 501(c)(21) tax-exempt trust fund. Provisions are made for estimated benefits based on annual evaluations prepared by independent actuaries. Charges are made to operations for self-insured black lung claims, as determined by an independent actuary at the present value of the actuarially computed liability for such benefits over the employee's applicable term of service. These actuarially determined liabilities use various actuarial assumptions, including the discount rate, future cost trends, demographic assumptions, and return on plan assets to estimate the costs and obligations for these items.

- The discount rate represents our estimate of the interest rate at which black lung benefit obligations could be effectively settled. Assumed discount rates are used in the measurement of the black lung benefit obligations and the interest cost and service cost components of the net periodic benefit expense. In estimating that rate, we use rates of return on high quality, fixed income investments. The weighted average discount rate used to determine black lung benefit obligations was 5.13% for the year ended December 31, 2023. The differences resulting from actual versus assumed discount rates are amortized into black lung net periodic benefit cost over the remaining average life of the active plan participants. A one percentage-point increase in the discount rate would increase the net periodic black lung benefit cost for the year ended December 31, 2023 by approximately \$0.4 million and decrease the projected benefit obligation as of December 31, 2023 by approximately \$10.3 million. The corresponding effects of a one percentage-point decrease in discount rate would decrease the net periodic black lung benefit cost for the year ended December 31, 2023 by approximately \$0.5 million and increase the projected benefit obligation as of December 31, 2023 by approximately \$12.6 million.

If our assumptions do not materialize as expected, actual cash expenditures and costs that we incur could differ materially from our current estimates. Moreover, regulatory changes could affect our obligation to satisfy these or additional obligations. As of December 31, 2023, we had estimated black lung benefit obligations of approximately \$107.3 million, including amounts reported as current, which are net of assets of \$2.6 million that are held in a tax-exempt trust fund. For the year ended December 31, 2023, we recorded a net periodic benefit cost of \$3.8 million for our black lung benefit obligations. Refer to Note 18 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for disclosures summarizing these underlying assumptions and the changes in these projected benefit obligations for the years ended December 31, 2023 and 2022.

Income Taxes. We recognize deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. 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 assets will not be realized. In evaluating our ability to recover our deferred tax assets within the jurisdiction in which they arise, we consider all available positive and negative evidence, including the expected reversals of deferred tax liabilities, projected future taxable income, taxable income available via carryback to prior years, tax planning strategies, and results of recent operations. We assess the realizability of our deferred tax assets, including scheduling the reversal of our deferred tax assets and liabilities, to determine the amount of valuation allowance needed. Scheduling the reversal of deferred tax asset and liability balances requires judgment and estimation. We believe the deferred tax liabilities relied upon as future taxable income in our assessment will reverse in the same period and jurisdiction and are of the same character as the temporary differences giving rise to the deferred tax assets that will be realized. At December 31, 2023, a valuation allowance of \$48.1 million has been provided on deferred tax assets not expected to provide future tax benefits. Refer to Note 17 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for additional disclosures on income taxes.

Asset Impairment. U.S. GAAP requires that a long-lived asset group that is held and used should be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the long-lived asset group might not be recoverable. Once indicators of potential impairment are identified, testing of a long-lived asset group for impairment is a two-step process. Step one evaluates the recoverability of an asset group by comparing its projected future net undiscounted cash flows to its carrying value. If the carrying value of an asset group exceeds its projected future net undiscounted cash flows, step two is performed whereby the fair value of the asset group is estimated and compared to its carrying amount. The amount of any potential impairment is equal to the excess of an asset group's carrying value over its estimated fair value. The amount of any potential impairment is allocated to the individual long-lived assets within the asset group on a pro-rata basis, except that the carrying value of individual long-lived assets are not reduced below their individual estimated fair values. Long-lived assets located in a close geographic area are grouped together for purposes of impairment testing when, after considering revenue and cost interdependencies, circumstances indicate the assets are used together to produce future cash flows. Our asset groups generally consist of the assets and applicable liabilities of one or more mines and preparation plants and associated coal reserves for which cash flows are largely independent of cash flows of other mines, preparation plants and associated reserves.

We estimate the fair value of an asset group generally using discounted cash flow analysis based on estimates of future sales volumes, coal prices, production costs, and a risk-adjusted cost of capital. Changes in any of these assumptions could materially impact the estimated undiscounted cash flows of our asset groups. Refer to Note 2 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K.

For a further discussion of the factors that could result in a change in our assumptions, see "Item 1A. Risk Factors" in this Annual Report on Form 10-K and our other filings with the Securities and Exchange Commission.

New Accounting Pronouncements. Refer to Note 2 to the Consolidated Financial Statements included elsewhere in this Annual Report on Form 10-K for disclosures related to new accounting policies adopted.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk

Commodity Price Risk

We manage our commodity price risk for coal sales through the use of coal supply agreements. Refer to "Management's Discussion and Analysis of Financial Condition and Results of Operations—Factors Affecting Our Results of Operations" for information on our sales commitments for 2024.

We have exposure to commodity price risk for supplies that are used directly or indirectly in the normal course of production such as diesel fuel, steel and other items such as explosives. We manage our risk for these items through strategic sourcing contracts in normal quantities with our suppliers.

The market price of diesel fuel fluctuates due to changes in production, seasonality, and other market factors generally outside of our control. Increased fuel costs may have a negative impact on our results of operations and financial condition. As of December 31, 2023, our forecasted diesel fuel usage and fixed price diesel fuel purchase commitments for 2024 are as follows:

	Budgeted Usage in Gallons	% Priced	Average Realized Price per Gallon
Diesel fuel	23.2 million	73.7 %	\$3.41

Interest Rate Risk

As of December 31, 2023, we maintain a senior secured asset-based revolving credit facility, which was refinanced in the fourth quarter of 2023, under which we may borrow up to \$155.0 million (less amounts outstanding for LCs). Any cash borrowings under the facility would bear a floating rate of interest. No cash borrowings were outstanding under the facilities as of December 31, 2023 or 2022. Refer to Note 13 for additional information.

As of December 31, 2023 and 2022, we had investments in trading securities of \$40.6 million and \$151.8 million respectively. While the fair value of these investments is exposed to risk with respect to changes in market rates of interest, we do not believe exposure to changes in interest rates is material to our Consolidated Financial Statements. We manage risk by investing in shorter term highly rated debt obligations (primarily U.S. government securities). As of December 31, 2023 and 2022, the remaining maturities of our acquired debt securities was less than 12 months.

Foreign Currency Risk

Our transactions are denominated in U.S. dollars, and, as a result, we do not have material exposure to currency exchange-rate risks. However, our 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 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.

Item 8. Financial Statements and Supplementary Data

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of Alpha Metallurgical Resources, Inc.

Opinions on the Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Alpha Metallurgical Resources, Inc. and subsidiaries (the Company) as of December 31, 2023 and 2022, and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2023, and the related notes (collectively, the financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023, in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with 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, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements 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. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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.

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 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 accounts or disclosures to which it relates.

Asset Retirement Obligations

As described in Notes 2 and 15 to the consolidated financial statements, the Company's consolidated asset retirement obligation liability was \$205 million as of December 31, 2023. The Company records the asset retirement obligation liability at fair value in the period in which the legal obligation associated with the retirement of the long-lived asset is incurred. Changes to the liability at operations that are not currently being reclaimed are offset by increasing or decreasing the carrying amount of the related long-lived asset. Changes to the liability at operations that are currently being reclaimed are recorded to depreciation, depletion, and amortization. On at least an annual basis the Company reviews its estimated future cash flows for its asset retirement obligation liability.

We identified the valuation of the asset retirement obligation liability as a critical audit matter because the estimate involves a high degree of subjectivity and auditing the significant assumptions utilized by management in estimating the amount of the liability requires judgment. In particular, the obligation liability is determined using a discounted cash flow technique and is based upon mining permit requirements and various assumptions including discount rates, inflation rate, estimates of disturbed acreage, timing of reclamation activities, and third-party reclamation costs.

Our audit procedures related to the Company's asset retirement obligation liability included the following, among others:

- We obtained an understanding of the relevant controls related to the Company's accounting for the asset retirement obligation liability, and tested such controls for design and operating effectiveness, including controls over management's review of the significant assumptions and data inputs described above.
- We compared significant valuation assumptions including the discount rates and inflation rate to market data and utilized a valuation specialist to assist in testing the Company's discounted cash flow model.
- We compared the estimates of disturbed acreage, timing of reclamation activities, and third-party reclamation costs to the prior year estimates, assessed consistency between timing of reclamation activities and projected mine lives, evaluated the appropriateness of the estimated costs based on mine type, and compared anticipated costs to recent operating data.
- We utilized an external specialist who performed observations of mine site operations, conducted interviews of engineering personnel, assessed compliance with mine closure and post closure plan regulatory requirements, and evaluated the reasonableness of the engineering estimates and assumptions.

/s/ RSM US LLP

We have served as the Company's auditor since 2020.

Atlanta, Georgia
February 26, 2024

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except share and per share data)

	Year Ended December 31,		
	2023	2022	2021
Revenues:			
Coal revenues	\$ 3,456,630	\$ 4,092,987	\$ 2,252,624
Other revenues	14,787	8,605	6,062
Total revenues	3,471,417	4,101,592	2,258,686
Costs and expenses:			
Cost of coal sales (exclusive of items shown separately below)	2,356,138	2,285,969	1,677,782
Depreciation, depletion and amortization	136,869	107,620	110,047
Accretion on asset retirement obligations	25,500	23,765	26,520
Amortization of acquired intangibles, net	8,523	19,498	13,244
Asset impairment and restructuring	—	—	(561)
Selling, general and administrative expenses (exclusive of depreciation, depletion and amortization shown separately above)	82,390	71,618	63,901
Total other operating loss (income):			
Mark-to-market adjustment for acquisition-related obligations	—	8,880	19,525
Other (income) expense	(1,088)	3,363	(10,972)
Total costs and expenses	2,608,332	2,520,713	1,899,486
Income from operations	863,085	1,580,879	359,200
Other (expense) income:			
Interest expense	(6,923)	(21,802)	(69,654)
Interest income	11,933	3,187	336
Loss on extinguishment of debt	(2,753)	—	—
Equity loss in affiliates	(18,263)	(14,346)	(4,149)
Miscellaneous (expense) income, net	(1,620)	6,832	6,465
Total other expense, net	(17,626)	(26,129)	(67,002)
Income before income taxes	845,459	1,554,750	292,198
Income tax expense	(123,503)	(106,205)	(3,408)
Net income	721,956	1,448,545	288,790
Basic income per common share	\$ 51.18	\$ 82.82	\$ 15.66
Diluted income per common share	\$ 49.30	\$ 79.49	\$ 15.30
Weighted average shares - basic	14,106,466	17,490,886	18,441,175
Weighted average shares - diluted	14,642,856	18,222,397	18,871,682

Refer to accompanying Notes to Consolidated Financial Statements.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(Amounts in thousands)

	Year Ended December 31,		
	2023	2022	2021
Net income	\$ 721,956	\$ 1,448,545	\$ 288,790
Other comprehensive (loss) income, net of tax:			
Employee benefit plans:			
Current period actuarial (loss) gain	\$ (34,205)	\$ 56,485	\$ 47,461
Income tax benefit (expense)	7,588	(12,888)	—
	\$ (26,617)	\$ 43,597	\$ 47,461
Less: reclassification adjustments for amounts reclassified to earnings due to amortization of net actuarial (gain) loss and settlements	(2,324)	3,555	6,021
Income tax benefit (expense)	516	(811)	—
	\$ (1,808)	\$ 2,744	\$ 6,021
Total other comprehensive (loss) income, net of tax	\$ (28,425)	\$ 46,341	\$ 53,482
Total comprehensive income	\$ 693,531	\$ 1,494,886	\$ 342,272

Refer to accompanying Notes to Consolidated Financial Statements.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except share and per share data)

	<u>December 31, 2023</u>	<u>December 31, 2022</u>
Assets		
Current assets:		
Cash and cash equivalents	\$ 268,207	\$ 301,906
Short-term investments	—	46,052
Trade accounts receivable, net of allowance for credit losses of \$234 and \$239 as of December 31, 2023 and 2022, respectively	509,682	407,210
Inventories, net	231,344	200,574
Short-term deposits	32	84,748
Short-term restricted cash	—	24,547
Prepaid expenses and other current assets	39,032	49,384
Total current assets	<u>1,048,297</u>	<u>1,114,421</u>
Property, plant, and equipment, net of accumulated depreciation and amortization of \$558,905 and \$491,186 as of December 31, 2023 and 2022, respectively	588,992	442,645
Owned and leased mineral rights, net of accumulated depletion and amortization of \$99,826 and \$77,333 as of December 31, 2023 and 2022, respectively	451,160	451,062
Other acquired intangibles, net of accumulated amortization of \$38,543 and \$53,719 as of December 31, 2023 and 2022, respectively	46,579	55,102
Long-term restricted investments	40,597	105,735
Long-term restricted cash	115,918	28,941
Deferred income taxes	8,028	11,378
Other non-current assets	106,486	103,195
Total assets	<u><u>\$ 2,406,057</u></u>	<u><u>\$ 2,312,479</u></u>
Liabilities and Stockholders' Equity		
Current liabilities:		
Current portion of long-term debt	\$ 3,582	\$ 3,078
Trade accounts payable	128,836	106,037
Acquisition-related obligations - current	—	28,254
Accrued expenses and other current liabilities	177,512	265,256
Total current liabilities	<u>309,930</u>	<u>402,625</u>
Long-term debt	6,792	7,897
Workers' compensation and black lung obligations	189,226	188,247
Pension obligations	101,908	110,836
Asset retirement obligations	166,509	142,048
Deferred income taxes	39,142	10,874
Other non-current liabilities	18,622	20,197
Total liabilities	<u>832,129</u>	<u>882,724</u>
Commitments and Contingencies (Note 21)		
Stockholders' Equity		
Preferred stock - par value \$0.01, 5,000,000 shares authorized, none issued	—	—
Common stock - par value \$0.01, 50,000,000 shares authorized, 22,058,135 issued and 12,938,679 outstanding at December 31, 2023 and 21,703,163 issued and 15,552,676 outstanding at December 31, 2022	221	217
Additional paid-in capital	834,482	815,442
Accumulated other comprehensive loss	(40,587)	(12,162)
Treasury stock, at cost: 9,119,456 shares at December 31, 2023 and 6,150,487 shares at December 31, 2022	(1,189,715)	(649,061)

Retained earnings	1,969,527	1,275,319
Total stockholders' equity	1,573,928	1,429,755
Total liabilities and stockholders' equity	<u>\$ 2,406,057</u>	<u>\$ 2,312,479</u>

Refer to accompanying Notes to Consolidated Financial Statements.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)

	Year Ended December 31,		
	2023	2022	2021
Operating activities:			
Net income	\$ 721,956	\$ 1,448,545	\$ 288,790
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, depletion and amortization	136,869	107,620	110,047
Amortization of acquired intangibles, net	8,523	19,498	13,244
Amortization of debt issuance costs and accretion of debt discount	1,947	8,282	12,338
Loss on extinguishment of debt	2,753	—	—
Mark-to-market adjustment for acquisition-related obligations	—	8,880	19,525
(Gain) loss on disposal of assets, net	(6,817)	43	(9,911)
Accretion on asset retirement obligations	25,500	23,765	26,520
Employee benefit plans, net	8,376	(4,492)	(1,751)
Deferred income taxes	39,722	(14,521)	(163)
Stock-based compensation	19,017	7,484	5,315
Equity loss in affiliates	18,263	14,346	4,149
Other, net	(363)	(761)	(5,873)
Changes in operating assets and liabilities			
Trade accounts receivable, net	(102,477)	82,774	(336,240)
Inventories, net	(27,900)	(63,169)	(21,331)
Prepaid expenses and other current assets	7,596	(12,031)	61,581
Deposits	80,729	(84,314)	26,853
Other non-current assets	3,837	11,268	(250)
Trade accounts payable	15,666	3,721	25,154
Accrued expenses and other current liabilities	(9,087)	(6,872)	15,961
Acquisition-related obligations	(28,254)	(22,264)	(18,121)
Asset retirement obligations	(19,189)	(18,699)	(16,306)
Other non-current liabilities	(45,508)	(25,098)	(24,588)
Net cash provided by operating activities	851,159	1,484,005	174,943
Investing activities:			
Capital expenditures	(245,373)	(164,309)	(83,300)
Proceeds on disposal of assets	8,173	3,623	8,224
Cash paid for business acquired	(11,919)	(24,878)	—
Purchases of investment securities	(207,065)	(269,420)	(17,985)
Sales and maturities of investment securities	320,961	149,397	13,265
Capital contributions to equity affiliates	(30,812)	(19,556)	(6,677)
Other, net	35	(4,214)	(3,382)
Net cash used in investing activities	(166,000)	(329,357)	(89,855)
Financing activities:			
Repurchases of long-term debt	—	—	(18,415)
Principal repayments of long-term debt	(2,314)	(450,622)	(119,097)
Dividend and dividend equivalents paid	(113,013)	(13,360)	—
Common stock repurchases and related expenses	(540,071)	(521,803)	(786)
Proceeds from exercise of warrants	4,322	5,643	—
Other, net	(5,352)	(1,726)	(8,747)

Net cash used in financing activities	(656,428)	(981,868)	(147,045)
Net increase (decrease) in cash and cash equivalents and restricted cash	28,731	172,780	(61,957)
Cash and cash equivalents and restricted cash at beginning of period	355,394	182,614	244,571
Cash and cash equivalents and restricted cash at end of period	<u>\$ 384,125</u>	<u>\$ 355,394</u>	<u>\$ 182,614</u>

Supplemental cash flow information:

Cash paid for interest	\$ 5,207	\$ 25,895	\$ 63,061
Cash paid for income taxes	\$ 79,221	\$ 139,663	\$ 176
Cash received for income tax refunds	\$ 30	\$ 6	\$ 64,498

Supplemental disclosure of noncash investing and financing activities:

Financing leases and capital financing - equipment	\$ 3,195	\$ 9,833	\$ 787
Accrued capital expenditures	\$ 25,004	\$ 18,456	\$ 9,964
Accrued common stock repurchases	\$ 8,118	\$ 3,016	\$ —
Accrued dividend payable	\$ 2,863	\$ 88,128	\$ —

The following table provides a reconciliation of cash and cash equivalents and restricted cash reported within the Consolidated Balance Sheets that sum to the total of the same such amounts shown in the Consolidated Statements of Cash Flows.

	As of December 31,		
	2023	2022	2021
Cash and cash equivalents	\$ 268,207	\$ 301,906	\$ 81,211
Short-term restricted cash	—	24,547	11,977
Long-term restricted cash	115,918	28,941	89,426
Total cash and cash equivalents and restricted cash shown in the Consolidated Statements of Cash Flows	<u>\$ 384,125</u>	<u>\$ 355,394</u>	<u>\$ 182,614</u>

Refer to accompanying Notes to Consolidated Financial Statements.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Amounts in thousands)

	Common Stock	Additional Paid-in Capital	Accumulated Other Comprehensive (Loss) Income	Treasury Stock at Cost	(Accumulated Deficit) Retained Earnings	Total Stockholders' Equity
Balances, December 31, 2020	\$ 206	\$ 779,424	\$ (111,985)	\$ (107,014)	\$ (360,529)	\$ 200,102
Net income	—	—	—	—	288,790	288,790
Other comprehensive income, net	—	—	53,482	—	—	53,482
Stock-based compensation and issuance of common stock for share vesting	2	5,313	—	—	—	5,315
Common stock repurchases and related expenses	—	—	—	(786)	—	(786)
Warrants exercises	—	6	—	—	—	6
Balances, December 31, 2021	\$ 208	\$ 784,743	\$ (58,503)	\$ (107,800)	\$ (71,739)	\$ 546,909
Net income	—	—	—	—	1,448,545	1,448,545
Other comprehensive income, net	—	—	46,341	—	—	46,341
Stock-based compensation, issuance of common stock for share vesting, and common stock reissuances	2	5,415	—	2,067	—	7,484
Exercise of stock options	—	1,172	—	—	—	1,172
Common stock repurchases and related expenses	—	—	—	(543,328)	—	(543,328)
Warrants exercises	7	24,112	—	—	—	24,119
Cash dividend and dividend equivalents declared (\$6.185 per share)	—	—	—	—	(101,487)	(101,487)
Balances, December 31, 2022	\$ 217	\$ 815,442	\$ (12,162)	\$ (649,061)	\$ 1,275,319	\$ 1,429,755
Net income	—	—	—	—	721,956	721,956
Other comprehensive loss, net	—	—	(28,425)	—	—	(28,425)
Stock-based compensation, issuance of common stock for share vesting, and common stock reissuances	2	12,127	—	6,888	—	19,017
Exercise of stock options	—	225	—	—	—	225
Common stock repurchases and related expenses	—	—	—	(547,542)	—	(547,542)
Warrants exercises	2	6,688	—	—	—	6,690
Cash dividend and dividend equivalents declared (\$1.940 per share)	—	—	—	—	(27,748)	(27,748)
Balances, December 31, 2023	\$ 221	\$ 834,482	\$ (40,587)	\$ (1,189,715)	\$ 1,969,527	\$ 1,573,928

Refer to accompanying Notes to Consolidated Financial Statements.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

(1) Business and Basis of Presentation

Business

Alpha Metallurgical Resources, Inc. (“Alpha” or the “Company”), previously named Contura Energy, Inc., is a Tennessee-based mining company with operations across Virginia and West Virginia. With customers across the globe, high-quality reserves and significant port capacity, Alpha is a leading U.S. supplier of metallurgical coal products for the steel industry.

The Company was formed to acquire and operate certain of Alpha Natural Resources, Inc.’s core coal operations, as part of the Alpha Natural Resources, Inc. bankruptcy reorganization. The Company began operations on July 26, 2016 and currently operates mines in the Central Appalachia region.

A merger with ANR, Inc. and Alpha Natural Resources Holdings, Inc. (together, the “Merger Companies”) was completed on November 9, 2018 (the “Merger”) pursuant to terms of the definitive merger agreement (the “Merger Agreement”). Upon the consummation of the transactions contemplated by the Merger Agreement, the Company began trading on the New York Stock Exchange under the ticker “CTRA.”

Effective February 1, 2021, the Company changed its corporate name from Contura Energy, Inc. to Alpha Metallurgical Resources, Inc. to more accurately reflect its strategic focus on the production of metallurgical coal. Following the effectiveness of its name change, the Company’s ticker symbol on the New York Stock Exchange changed from “CTRA” to “AMR” effective on February 4, 2021.

Basis of Presentation

Together, the consolidated statements of operations, comprehensive income, balance sheets, cash flows and stockholders’ equity for the Company are referred to as the “Consolidated Financial Statements.” The Consolidated Financial Statements are also referenced across periods as “Consolidated Statements of Operations,” “Consolidated Statements of Comprehensive Income,” “Consolidated Balance Sheets,” “Consolidated Statements of Cash Flows,” and “Consolidated Statements of Stockholders’ Equity.”

The Consolidated Financial Statements include all wholly owned subsidiaries’ results of operations for the years ended December 31, 2023, 2022, and 2021. All significant intercompany transactions have been eliminated in consolidation.

The accompanying Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”).

(2) Summary of Significant Accounting Policies

Use of Estimates

The preparation of the Company’s Consolidated Financial Statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the Consolidated Financial Statements and the reported amounts of revenues and expenses during the reporting period. Significant items subject to such estimates and assumptions include inventories; mineral reserves and resources; long-lived asset impairments; reclamation obligations; post-employment and other employee benefit obligations; useful lives, depletion and amortization; reserves for workers’ compensation and black lung claims; deferred income taxes; income taxes payable; income taxes refundable and receivable; reserves for contingencies and litigation; and fair value of financial instruments. Estimates are based on facts and circumstances believed to be reasonable at the time; however, actual results could differ from those estimates.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash held with reputable depository institutions and highly liquid, short-term investments, such as highly-rated money market funds, with original maturities of three months or less. Cash and cash equivalents are stated at cost, which approximates fair value.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Restricted Cash

Amounts included in restricted cash represent cash and cash equivalents that are restricted as to withdrawal as required by certain agreements entered into by the Company and provide collateral to secure the certain obligations which have been written on the Company's behalf. Refer to Note 21 for further information.

Investments

Short-term investments consist of U.S government securities. Restricted investments consist of Federal Deposit Insurance Company ("FDIC") insured certificates of deposit, corporate fixed income, and U.S. government securities that are restricted as to withdrawal as required by certain agreements entered into by the Company and provide collateral to secure certain obligations which have been written on the Company's behalf.

All investments are classified as trading securities as of December 31, 2023 and 2022. Trading securities are recorded initially at cost and are adjusted to fair value at each reporting period with unrealized gains and losses recorded in current period earnings or loss. Refer to Note 21 for further information.

Deposits

Deposits represent cash deposits held at third parties as required by certain agreements entered into by the Company to provide cash collateral to secure the following obligations which have been written on the Company's behalf. Refer to Note 21 for further information.

Trade Accounts Receivable and Allowance for Credit Losses

Trade accounts receivable are recorded at their invoiced amounts and do not bear interest. The Company markets its coal primarily to international and domestic steel producers and electric utilities in the United States. Credit is extended based on an evaluation of a customer's financial condition, including a review of third-party credit score information. Collateral is generally not required. Accounts receivable balances are monitored against approved credit limits. Credit limits are monitored 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 limits, obtaining letters of credit ("LCs"), obtaining credit insurance, or requiring pre-payment for shipments. Credit losses have historically not been material. Account balances are written-off against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote. Refer to Note 22 for further information.

Inventories

Coal is reported as inventory at the point in time the coal is extracted from the mine. Raw coal represents coal stockpiles that may be sold in current condition or may be further processed prior to shipment to a customer. Saleable coal represents coal stockpiles that require no further processing prior to shipment to a customer.

Coal inventories are valued at the lower of average cost or net realizable value. The cost of coal inventories is determined based on the average cost of production, which includes labor, supplies, equipment costs, operating overhead, depreciation, and other related costs. Net realizable value considers the projected future sales price of the product, less estimated preparation and selling costs. Material and supplies inventories are valued at average cost, less an allowance for obsolete and surplus items. Refer to Note 6 for further information.

Advanced Mining Royalties

Lease rights to coal reserves are often acquired in exchange for royalty payments. Advanced mining royalties are advanced payments made to lessors under terms of mineral lease agreements that are recoupable against future production royalties. These advanced payments are deferred and charged to operations as the coal reserves are mined. The Company regularly reviews recoverability of advanced mining royalties and establishes or adjusts the allowance for advanced mining royalties as necessary using the specific identification method. Advanced royalty balances are generally charged off against the allowance when they are no longer recoupable. Advanced mining royalties are included within Other non-current assets on the Company's Consolidated Balance Sheets. Refer to Note 9 for further information.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Property, Plant, and Equipment, Net

Costs for mine development incurred to expand capacity of operating mines or to develop new mines are capitalized and charged to operations on the units-of-production method over the estimated proven and probable reserve tons directly benefiting from the capital expenditures. Mine development costs include costs incurred for site preparation and development of the mines during the development stage less any incidental revenue generated during the development stage. Mining equipment, buildings, and other fixed assets are stated at cost and depreciated on a straight-line basis over estimated useful lives ranging from one to 25 years. Leasehold improvements are amortized using the straight-line method, over the shorter of the estimated useful lives or term of the lease. Major repairs and betterments that significantly extend original useful lives or improve productivity are capitalized and depreciated over the period benefited. Maintenance and repairs are expensed as incurred. When equipment is retired or disposed, the related cost and accumulated depreciation are removed from the respective accounts and any profit or loss on disposal is recognized in Other (income) expense in the Company's Consolidated Statements of Operations. Refer to Note 8 for further information.

Owned and Leased Mineral Rights

Owned and leased mineral rights, net of accumulated depletion and amortization, for the years ended December 31, 2023 and 2022 were \$451,160 and \$451,062, respectively, and are reported in assets in the Company's Consolidated Balance Sheets. These amounts include \$27,473 and \$20,284 of asset retirement obligation assets, net of accumulated amortization, associated with active mining operations for the years ended December 31, 2023 and 2022, respectively.

Costs to obtain owned and leased mineral rights are capitalized and amortized to operations as depletion expense using the units-of-production method. Only proven and probable reserves are included in the depletion base. Depletion expense is included in Depreciation, depletion and amortization in the accompanying Consolidated Statements of Operations and was \$23,944, \$23,078, and \$23,541 for the years ended December 31, 2023, 2022, and 2021 respectively.

Depletion expense for the years ended December 31, 2023, 2022, and 2021 includes a credit of (\$34), a credit of (\$3,016), and an expense of \$5,782, respectively, related to revisions to asset retirement obligations. Refer to Note 15 for further disclosures related to asset retirement obligations.

Leases

In accordance with ASC 842, the Company recognizes right of use assets and lease liabilities on the Consolidated Balance Sheets for all leases with a term longer than 12 months. Some of these leases include both lease and non-lease components which are accounted for as a single lease component as the Company has elected the practical expedient to combine these components for all leases. The discount rates used to determine the present value of the lease assets and liabilities are based on the Company's incremental borrowing rate at the lease commencement date and commensurate with the remaining lease term. As the rates implicit in most of the Company's leases are not readily determinable, the Company uses a collateralized incremental borrowing rate based on the information available at the lease commencement date in determining the present value of future payments. The Company uses the portfolio approach and groups leases by short-term and long-term categories, applying the corresponding incremental borrowing rates to these categories of leases. For leases with a term of 12 months or less, no right of use assets or liabilities are recognized on the Consolidated Balance Sheets and the Company recognizes the lease expense on a straight-line basis over the lease term. Additionally, the Company recognizes variable lease payments as an expense in the period incurred. The Company has elected to show net instead of gross amounts for right-of-use assets and liabilities within its Consolidated Statements of Cash Flows. Refer to Note 11 for further information.

Acquired Intangibles

The Company has recognized assets for acquired mine permits which were valued based on the replacement cost and lost profits method as of the Merger date. The balances of such assets as of December 31, 2023 and 2022, net of accumulated amortization, were \$46,579 and \$55,102, respectively, and are included within Other acquired intangibles, net of accumulated amortization, on the Company's Consolidated Balance Sheets.

The acquired mine permits are amortized over the estimated life of the associated mine. Amortization expense is included in Amortization of acquired intangibles, net in the accompanying Consolidated Statements of Operations and was \$8,523, \$19,498, and \$13,571 for the years ended December 31, 2023, 2022, and 2021, respectively.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Additionally, the Company previously recognized assets for acquired above market-priced coal supply agreements and liabilities for acquired below market-priced coal supply agreements. The agreements were amortized over the actual number of tons shipped over the life of each contract. Amortization expense is included in Amortization of acquired intangibles, net in the accompanying Consolidated Statements of Operations and was \$0, \$0, and (\$327) for the years ended December 31, 2023, 2022, and 2021, respectively.

Future net amortization expense related to acquired intangibles is expected to be \$6,703, \$5,892, \$5,373, \$4,790, \$4,790, and \$19,031 for 2024, 2025, 2026, 2027, 2028, and after 2028, respectively.

Goodwill

Goodwill represents the excess of the purchase price over the fair value of the net identifiable tangible and intangible assets of acquired companies. Goodwill for the years ended December 31, 2023 and 2022 was \$11,124 and \$10,736, respectively, and is included within Other non-current assets on the Company's Consolidated Balance Sheets. In January 2023, primarily to secure additional coal trucks and related equipment and facilities, the Company purchased substantially all the assets of a freight, hauling and transportation services business for \$11,919, resulting in \$388 of goodwill. The acquired goodwill, related primarily to the acquired workforce and expected cost synergies, was allocated to the Company's Met reportable segment. In December 2022, the Company purchased substantially all of the assets of a mining equipment component manufacturing and rebuild business to help secure the supply of certain underground mining equipment parts needed for the Company's operations for \$24,878, which included \$7,787 of working capital, \$6,355 of property, plant, and equipment, and \$10,736 of goodwill. The acquired goodwill, related primarily to the acquired workforce and expected cost synergies, was allocated to the Company's Met reportable segment. Goodwill is not amortized; instead, it is tested for impairment annually as of October 31 of each year or more frequently if indicators of impairment exist.

The Company assesses goodwill for impairment on a qualitative basis. If the Company determines that more likely than not the fair value of a reporting unit containing goodwill exceeds its carrying amount, no further impairment testing is required. If the qualitative assessment indicates that an impairment potentially exists, then the Company quantitatively tests goodwill for impairment by comparing the fair value of the reporting unit to its carrying amount. If the fair value of the reporting unit is lower than its carrying amount, its goodwill is written down by the lesser of the amount by which the reporting units carrying amount exceeded its fair value or its carrying amount of goodwill.

Asset Impairment

Long-lived assets, such as property, plant, and equipment, mineral rights, and acquired intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset or asset groups may not be recoverable. Recoverability of assets or asset groups to be held and used is measured by a comparison of the carrying amount of an asset or asset group to the estimated undiscounted future cash flows expected to be generated by the asset or asset group. Long-lived assets located in a close geographic area are grouped together for purposes of impairment testing when, after considering revenue and cost interdependencies, circumstances indicate the assets are used together to produce future cash flows. The Company's asset groups generally consist of the assets and applicable liabilities of one or more mines and preparation plants and associated coal reserves for which cash flows are largely independent of cash flows of other mines, preparation plants, and associated coal reserves. If the carrying amount of an asset or asset group exceeds its estimated future cash flows, the potential impairment is equal to the amount by which the carrying amount of the asset or asset group exceeds the fair value of the asset or asset group. The Company estimates the fair value of an asset group generally using discounted cash flow analysis based on estimates of future sales volumes, coal prices, production costs, and a risk-adjusted cost of capital. These estimates generally constitute unobservable Level 3 inputs under the fair value hierarchy. The amount of impairment, if any, is allocated to the long-lived assets on a pro-rata basis, except that the carrying value of the individual long-lived assets are not reduced below their estimated fair value.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

Asset Retirement Obligations

Minimum standards for mine reclamation have been established by various regulatory agencies and dictate the reclamation requirements at the Company's operations. The Company's asset retirement obligations consist principally of costs to reclaim acreage disturbed at surface operations and estimated costs to reclaim support acreage, treat mine water discharge, and perform other related functions at underground mines. The Company records these reclamation obligations at fair value in the period in which the legal obligation associated with the retirement of the long-lived asset is incurred. Changes to the liability at operations that are not currently being reclaimed are offset by increasing or decreasing the carrying amount of the related long-lived asset. Changes to the liability at operations that are currently being reclaimed are recorded to Depreciation, depletion, and amortization. Over time, the liability is accreted and any capitalized cost is depreciated or depleted over the useful life of the related asset. To settle the liability, the obligation is paid, and any difference between the liability and the amount of cash paid is recorded within Depreciation, depletion and amortization within the Consolidated Statements of Operations at the time the reclamation work is completed. On at least an annual basis, the Company reviews its estimated future cash flows for its asset retirement obligations. Refer to Note 15 for further information.

Income Taxes

The Company recognizes deferred tax assets and liabilities using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. 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 assets will not be realized. In evaluating its ability to recover deferred tax assets within the jurisdiction in which they arise, the Company considers all available positive and negative evidence, including the expected reversals of deferred tax liabilities, projected future taxable income, taxable income available via carryback to prior years, tax planning strategies, and results of recent operations. The Company assesses the realizability of its deferred tax assets, including scheduling the reversal of its deferred tax assets and liabilities, to determine the amount of valuation allowance needed. Scheduling the reversal of deferred tax asset and liability balances requires judgment and estimation. The Company believes the deferred tax liabilities relied upon as future taxable income in its assessment will reverse in the same period and jurisdiction and are of the same character as the temporary differences giving rise to the deferred tax assets that will be realized. Refer to Note 17 for further information.

Deferred Financing Costs

The costs to obtain new debt financing or amend existing financing agreements are generally deferred and amortized to interest expense over the life of the related indebtedness or credit facility using the effective interest method. Unamortized deferred financing costs are presented in the Consolidated Balance Sheets as a direct deduction from the carrying amount of the debt liability, consistent with debt discounts or premiums. Unamortized deferred financing costs associated with undrawn credit facilities are included in the Consolidated Balance Sheets within Other non-current assets.

Revenue Recognition

In accordance with ASC 606 Revenue from Contracts with Customers ("ASC 606"), the Company measures revenue based on the consideration specified in a contract with a customer and recognizes revenue as a result of satisfying its promise to transfer goods or services in a contract with a customer using the following general revenue recognition five-step model: (1) identify the contract; (2) identify performance obligations; (3) determine transaction price; (4) allocate transaction price; and (5) recognize revenue. Freight and handling costs paid to third-party carriers and invoiced to coal customers are recorded as freight and handling costs and freight and handling fulfillment revenues within cost of coal sales and coal revenues, respectively. Refer to Note 3 for further information.

Workers' Compensation and Pneumoconiosis (Black Lung) Benefits

Workers' Compensation

As of December 31, 2023, the Company's subsidiaries generally utilize high-deductible insurance programs for workers' compensation claims at its operations with the exception of certain subsidiaries in which the Company is a qualified self-insurer for workers' compensation obligations. The liabilities for workers' compensation claims are estimates of the ultimate losses incurred based on the Company's experience and include a provision for incurred but not reported losses. Adjustments to the probable ultimate liabilities are made annually based on an actuarial study and adjustments to the liability are recorded based on the results of this study. These short-term and long-term obligations are included in the Consolidated Balance Sheets within

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

Accrued expenses and other current liabilities and Workers' compensation and black lung obligations, respectively, with the related expected insurance receivables within Prepaid expenses and other current assets and Other non-current assets. As of December 31, 2023 and 2022, the workers' compensation liability was net of a discount of \$22,205 and \$22,824, respectively, related to fair value adjustments associated with acquisition accounting. Refer to Note 18 for further information.

Black Lung Benefits

The Company is required by federal and state statutes to provide benefits to employees for awards related to black lung. As of December 31, 2023, certain of the Company's subsidiaries are insured for black lung obligations by a third-party insurance provider and certain subsidiaries are self-insured for state black lung obligations. Certain other subsidiaries are self-insured for federal black lung benefits and may fund benefit payments through a Section 501(c)(21) tax-exempt trust fund. Charges are made to operations for black lung claims, as determined by an independent actuary at the present value of the actuarially computed liability for such benefits over the employee's applicable term of service. The Company recognizes in its Consolidated Balance sheets the amount of the Company's unfunded Accumulated Benefit Obligation ("ABO") at the end of the year. The actuarial gains and losses recognized in accumulated other comprehensive income (loss) are amortized into components of net periodic benefit cost over the expected lifetime of active participants (the Company does not use a corridor method). These short-term and long-term obligations are included in the Consolidated Balance Sheets within Accrued expenses and other current liabilities and Workers' compensation and black lung obligations, respectively. Refer to Note 18 for further information.

Pension

The Company is required to recognize the overfunded or underfunded status of a defined benefit pension plan as an asset or liability in its Consolidated Balance Sheets and to recognize changes in that funded status in the year in which the changes occur through other comprehensive (loss) income. The actuarial gains and losses recognized in accumulated other comprehensive income (loss) are amortized into components of net periodic benefit cost over the average future lifetime of participants expected to have benefits (the Company does not use a corridor method). The Company is required to measure plan assets and benefit obligations as of the date of the Company's fiscal year-end Consolidated Balance Sheet and provide the required disclosures as of the end of each fiscal year. Refer to Note 18 for information.

Postretirement Life Insurance Benefits

As part of the Alpha Natural Resources, Inc. bankruptcy reorganization plan and the Retiree Committee Settlement Agreement, the Company assumed the liability for life insurance benefits for certain disabled and non-union retired employees. Provisions are made for estimated benefits based on annual evaluations prepared by independent actuaries. Adjustments to the probable ultimate liabilities are made annually based on an actuarial study and adjustments to the liability are recorded based on the results of this study. These obligations are included in the Consolidated Balance Sheets as Accrued expenses and other current liabilities and Other non-current liabilities. Refer to Note 18 for further information.

Net Income per Share

Basic net income per share is computed by dividing net income by the weighted-average number of outstanding common shares for the period. Diluted earnings per share reflects the potential dilution that could occur if instruments that may require the issuance of common shares in the future were settled and the underlying common shares were issued. Diluted earnings per share is computed by increasing the weighted-average number of outstanding common shares computed in basic earnings per share to include the additional common shares that would be outstanding after issuance and adjusting net income for changes that would result from the issuance. Only those securities that are dilutive are included in the calculation. In periods of loss, the number of shares used to calculate diluted earnings is the same as basic earnings per share. Refer to Note 5 for further information.

Stock-Based Compensation

The Company recognizes expense for stock-based compensation awards based on their grant-date fair value. The expense is recorded over the respective service period of the underlying award. Liability classified stock-based compensation awards are remeasured each reporting period at fair value until the award is settled. The Company recognizes forfeitures of stock-based compensation awards as they occur. Refer to Note 19 for further information.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Warrants

On July 26, 2016 (the “Initial Issue Date”), the Company issued warrants, which were classified as equity instruments, and were exercisable for cash or on a cashless basis at any time from the Initial Issue Date until July 26, 2023, and no fractional shares were issued upon warrant exercises. The exercise price and the warrant share number were adjusted in respect of certain dilutive events with respect to common stock. At 5:00 pm Eastern time on July 26, 2023 the Company’s Series A Warrants expired pursuant to their terms. Refer to Note 7 for additional information.

Equity Method Investments

Investments and membership interests in joint ventures are accounted for under the equity method of accounting if the Company has the ability to exercise significant influence, but not control, over the entity. Under the equity method of accounting, the Company’s proportionate share of the entity’s comprehensive income or loss each reporting period is reflected in Equity loss in affiliates in the Consolidated Statements of Operations. Equity method investments are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the investment may not be recoverable. The carrying values of the Company’s equity method investments are included within Other non-current assets on the Company’s Consolidated Balance Sheets. Refer to Notes 9 and 10 for additional information.

Recent Accounting Guidance

Segment Disclosures: In November 2023, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2023-07, *Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures* (“ASU 2023-07”). This update requires public entities to disclose significant segment expenses that are regularly provided to its chief operating decision maker and other segment items and to provide in interim periods all disclosures about a reportable segment’s profit or loss and assets that are currently required annually. The additional disclosures are required to be provided on a retrospective basis. The amendments are effective for fiscal years beginning after December 15, 2023, and interim periods within fiscal years beginning after December 15, 2024. The Company will provide the additional required disclosures upon adoption.

Income Tax Disclosures: In December 2023, the FASB issued ASU 2023-09, *Income Taxes (Topic 740): Improvements to Income Tax Disclosures* (“ASU 2023-09”). This update requires public business entities to disclose in their income tax rate reconciliation table additional categories of information about federal, state, and foreign income taxes and to provide additional details about the reconciling items in categories meeting a quantitative threshold. The guidance will also require entities to disclose income taxes paid, net of refunds, disaggregated by federal, state, and foreign taxes for annual periods and to disaggregate the information by jurisdiction based on a quantitative threshold. The additional disclosures are required to be provided on a prospective basis with the option to provide retrospectively. The amendments are effective for fiscal years beginning after December 15, 2024. The Company will provide the additional required disclosures upon adoption.

(3) Revenue

Disaggregation of Revenue from Contracts with Customers

ASC 606 requires that entities disclose disaggregated revenue information in categories (such as type of good or service, geography, market, type of contract, etc.) that depict how the nature, amount, timing, and uncertainty of revenue and cash flow are affected by economic factors. ASC 606 explains that the extent to which an entity’s revenue is disaggregated depends on the facts and circumstances that pertain to the entity’s contracts with customers and that some entities may need to use more than one type of category to meet the objective for disaggregating revenue.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

The Company earns revenues primarily through the sale of coal produced at Company operations and coal purchased from third parties. The Company extracts, processes and markets met and thermal coal from deep and surface mines for sale to steel and coke producers, industrial customers, and electric utilities. The Company conducts mining operations only in the United States with mines in Central Appalachia. The Company has one reportable segment: Met. In addition to the one reportable segment, the All Other category includes general corporate overhead and corporate assets and liabilities, the former CAPP - Thermal operations, and the elimination of certain intercompany activity, as well as expenses associated with certain idled/closed mines. Refer to Note 23 for further segment information.

The Company has disaggregated revenue between met coal and thermal coal and export and domestic revenues which depicts the pricing and contract differences between the two. Export revenue generally is derived by spot or short term contracts with pricing determined at the time of shipment or based on a market index; whereas domestic revenue is characterized by contracts that typically have a term of one year or longer and with fixed pricing terms. The following tables disaggregate the Company's coal revenues by product category and by market to depict how the nature, amount, timing, and uncertainty of the Company's coal revenues and cash flows are affected by economic factors:

	Year Ended December 31,		
	2023	2022	2021
Export met coal revenues	\$ 2,412,960	\$ 3,195,516	\$ 1,675,147
Export thermal coal revenues	126,108	107,961	30,879
Total export coal revenues	\$ 2,539,068	\$ 3,303,477	\$ 1,706,026
Domestic met coal revenues	\$ 865,667	\$ 687,795	\$ 396,160
Domestic thermal coal revenues	51,895	101,715	150,438
Total domestic coal revenues	\$ 917,562	\$ 789,510	\$ 546,598
Total met coal revenues	\$ 3,278,627	\$ 3,883,311	\$ 2,071,307
Total thermal coal revenues	178,003	209,676	181,317
Total coal revenues	\$ 3,456,630	\$ 4,092,987	\$ 2,252,624

Performance Obligations

The Company considers each individual transfer of coal on a per shipment basis to the customer a performance obligation. The pricing terms of the Company's contracts with customers include fixed pricing, variable pricing, or a combination of both fixed and variable pricing. All the Company's revenue derived from contracts with customers is recognized at a point in time. The following table includes estimated revenue expected to be recognized in the future related to performance obligations that are unsatisfied as of December 31, 2023.

	2024	2025	2026	2027	2028	Total
Estimated coal revenues ⁽¹⁾	\$ 124,612	\$ —	\$ —	\$ —	\$ —	\$ 124,612

⁽¹⁾ Amounts only include estimated coal revenues associated with contracts with customers with fixed pricing with original expected duration of more than one year. The Company has elected not to disclose the aggregate amount of the transaction price allocated to the performance obligations that are unsatisfied (or partially unsatisfied) as of the end of the reporting period for performance obligations with either of the following conditions: 1) the remaining performance obligation is part of a contract that has an original expected duration of one year or less; or 2) the remaining performance obligation has variable consideration that is allocated entirely to a wholly unsatisfied performance obligation.

(4) Accumulated Other Comprehensive Loss

The following tables summarize the changes to accumulated other comprehensive loss during the years ended December 31, 2023, 2022, and 2021:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

	Balance January 1, 2023	Other comprehensive loss before reclassifications	Amounts reclassified from accumulated other comprehensive loss	Balance December 31, 2023
Employee benefit costs	\$ (12,162)	\$ (26,617)	\$ (1,808)	\$ (40,587)
	Balance January 1, 2022	Other comprehensive income before reclassifications	Amounts reclassified from accumulated other comprehensive loss	Balance December 31, 2022
Employee benefit costs	\$ (58,503)	\$ 43,597	\$ 2,744	\$ (12,162)
	Balance January 1, 2021	Other comprehensive income before reclassifications	Amounts reclassified from accumulated other comprehensive loss	Balance December 31, 2021
Employee benefit costs	\$ (111,985)	\$ 47,461	\$ 6,021	\$ (58,503)

The following table summarizes the amounts reclassified from accumulated other comprehensive loss and the Consolidated Statements of Operations line items affected by the reclassification during the years ended December 31, 2023, 2022, and 2021:

Details about accumulated other comprehensive loss components	Amounts reclassified from accumulated other comprehensive loss			Affected line item in the Consolidated Statements of Operations
	Year Ended December 31,			
	2023	2022	2021	
Employee benefit costs:				
Amortization of actuarial (gain) loss ⁽¹⁾	\$ (2,324)	\$ 3,311	\$ 5,653	Miscellaneous (expense) income, net
Settlement ⁽¹⁾	—	244	368	Miscellaneous (expense) income, net
Total before income tax	\$ (2,324)	\$ 3,555	\$ 6,021	
Income tax benefit (expense)	516	(811)	—	Income tax expense
Total, net of income tax	\$ (1,808)	\$ 2,744	\$ 6,021	

⁽¹⁾ These accumulated other comprehensive loss components are included in the computation of net periodic benefit costs (credits) for certain employee benefit plans. Refer to Note 18.

(5) Net Income per Share

The number of shares used to calculate basic net income per common share is based on the weighted average number of the Company's outstanding common shares during the respective period. The number of shares used to calculate diluted net income per common share is based on the number of common shares used to calculate basic net income per common share plus the dilutive effect of stock options and other stock-based instruments held by the Company's employees and directors during the period, and the Company's outstanding warrants. The dilutive effect of outstanding stock-based instruments is determined by application of the treasury stock method. The stock options and warrants become dilutive for diluted net income per common share calculations when the market price of the Company's common stock exceeds the exercise price. Anti-dilution also occurs in periods of a net loss, and the dilutive impact of all warrants and share-based compensation awards are excluded.

For the years ended December 31, 2023, 2022, and 2021, respectively, 1,240, 0, and 717,992 warrants, stock options, and other stock-based instruments were excluded from the computation of dilutive net income per common share because they would have been anti-dilutive. When applying the treasury stock method, anti-dilution generally occurs when the exercise prices or unrecognized compensation cost per share are higher than the Company's average stock price during an applicable period.

The following table presents the net income per common share for the years ended December 31, 2023, 2022, and 2021:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	Year Ended December 31,		
	2023	2022	2021
Basic			
Net income	\$ 721,956	\$ 1,448,545	\$ 288,790
Weighted average common shares outstanding - basic	14,106,466	17,490,886	18,441,175
Net income per common share - basic	\$ 51.18	\$ 82.82	\$ 15.66
Diluted			
Weighted average common shares outstanding - basic	14,106,466	17,490,886	18,441,175
Diluted effect of warrants	81,352	275,715	35,574
Diluted effect of stock options	1,400	4,171	1,753
Diluted effect of other stock-based instruments	453,638	451,625	393,180
Weighted average common shares outstanding - diluted	14,642,856	18,222,397	18,871,682
Net income per common share - diluted	\$ 49.30	\$ 79.49	\$ 15.30

(6) Inventories, net

Inventories, net consisted of the following:

	December 31,	
	2023	2022
Raw coal	\$ 52,508	\$ 57,382
Saleable coal	120,000	91,474
Materials, supplies and other, net	58,836	51,718
Total inventories, net	\$ 231,344	\$ 200,574

(7) Capital Stock

Share Repurchase Program

On February 21, 2023, the Company's Board of Directors (the "Board") approved a \$200,000 increase to the existing common share repurchase program that the Board adopted on March 4, 2022, bringing the total authorization to repurchase the Company's stock to \$1,200,000. On October 31, 2023, the Board approved an additional \$300,000 increase to the share repurchase program, bringing the total authorization to repurchase the Company's stock to \$1,500,000. Share repurchases may be made from time to time through open market transactions, block trades, tender offers, or otherwise, and the program has no expiration date. The share repurchase program does not obligate the Company to acquire any particular amount of common stock or to acquire shares on any particular timetable, and the program may be suspended at any time at the Company's discretion. Repurchases under the program are subject to market and business conditions, available liquidity, the Company's cash needs, restrictions under agreements or obligations, legal or regulatory requirements or restrictions and other relevant factors. As of December 31, 2023, the Company had repurchased an aggregate of 6,475,271 shares under the program for an aggregate purchase price of approximately \$1,040,128 (comprised of \$1,039,934 of share repurchases and \$194 of related fees). The Company has also accrued a stock repurchase excise tax of \$4,665 related to the share repurchase program as of December 31, 2023, which is recorded in treasury stock at cost.

Dividend Program

On May 3, 2022, the Board adopted a dividend policy. Pursuant to this policy, the Board initially intended to pay aggregate cash dividends of \$1.50 per share of common stock per year, with \$0.375 per share paid each quarter. Subsequently, during the years ended December 31, 2022 and 2023 the Board increased the quarterly dividend amounts. In addition, pursuant to the terms of certain stock-based compensation awards under the Company's Management Incentive Plan (the "MIP") and Long-

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Term Incentive Plan (the “LTIP”), dividend equivalent amounts for each quarterly dividend will become payable at various vesting dates with respect to each underlying outstanding award.

The Board declared the following dividends on the Company’s common stock during the year ended December 31, 2023:

Total Dividend per Share	Total Dividends Paid ⁽¹⁾	Declaration Date	Holders of Record Date	Payable Date
\$ 0.44	\$ 6,602	February 21, 2023	March 15, 2023	April 3, 2023
\$ 0.50	\$ 7,001	May 3, 2023	June 15, 2023	July 5, 2023
\$ 0.50	\$ 6,736	August 2, 2023	September 15, 2023	October 3, 2023
\$ 0.50	\$ 6,510	October 31, 2023	December 1, 2023	December 15, 2023
<u>\$ 1.94</u>	<u>\$ 26,849</u>			

⁽¹⁾ Excludes dividend equivalents paid or accrued of \$899 as of December 31, 2023.

The decision to declare and pay cash dividends will be made by the Board and will depend on the Company’s earnings, financial condition and other relevant factors. On August 2, 2023, the Board determined to end the Company’s fixed dividend program following the quarterly dividend declared and paid in the fourth quarter of 2023 and to focus instead on the Company’s share repurchase program.

Warrants

On July 26, 2016, the Company issued 810,811 warrants, which were classified as equity instruments. Pursuant to the underlying warrant agreement, the warrants were exercisable for cash or on a cashless basis at any time until their expiration, and no fractional shares were to be issued upon warrant exercise. Pursuant to the underlying warrant agreement (refer to Note 2), the exercise price was adjusted from \$45.086 per share to \$44.972 per share as of the March 15, 2023 dividend record date and to \$44.820 per share as of the June 15, 2023 dividend record date, while the warrant share number remained unchanged at 1.20. At 5:00 pm Eastern time on July 26, 2023 the Company’s Series A Warrants expired pursuant to their terms.

As of December 31, 2023, no warrants remained outstanding as the warrants expired during the third quarter of 2023. For the year ended December 31, 2023, the Company issued 169,028 shares of common stock resulting from exercises of its warrants and, pursuant to the terms of the underlying warrant agreement, withheld 20,139 of the issued shares in satisfaction of the warrant exercise price and in lieu of fractional shares, which were subsequently reclassified as treasury stock in the amount of \$2,368.

As of December 31, 2022, 190,838 warrants were outstanding, with a total of 229,006 shares underlying the un-exercised warrants. For the year ended December 31, 2022, the Company issued 702,182 shares of common stock resulting from exercises of its warrants and, pursuant to the terms of the underlying warrant agreement, withheld 187,857 of the issued shares in satisfaction of the warrant exercise price and in lieu of fractional shares, which were subsequently reclassified as treasury stock in the amount of \$18,509.

As of December 31, 2021, 801,246 warrants were outstanding, with a total of 921,433 shares underlying the un-exercised warrants. For the year ended December 31, 2021, the Company issued 143 shares of common stock resulting from exercises of its warrants and, pursuant to the terms of the underlying warrant agreement, withheld 17 of the issued shares in satisfaction of the warrant exercise price and in lieu of fractional shares, which were subsequently reclassified as treasury stock.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

(8) Property, Plant, and Equipment, net

Property, plant, and equipment, net, consisted of the following:

	December 31,	
	2023	2022
Plant and mining equipment	\$ 890,327	\$ 723,056
Mine development	162,285	130,144
Land	32,033	27,937
Office equipment, software and other	5,356	3,111
Construction in progress	57,896	49,583
Total property, equipment and mine development costs	\$ 1,147,897	\$ 933,831
Less accumulated depreciation and amortization	(558,905)	(491,186)
Total property, plant, and equipment, net	<u>\$ 588,992</u>	<u>\$ 442,645</u>

Included in plant and mining equipment are assets under financing leases totaling \$10,964 and \$13,139 with accumulated depreciation of \$5,015 and \$7,710 as of December 31, 2023 and 2022, respectively.

Depreciation and amortization expense associated with property, plant, equipment and non-mineral asset retirement obligation assets, net, was \$112,925, \$84,542, and \$86,506 for the years ended December 31, 2023, 2022, and 2021 respectively.

Depreciation expense for the years ended December 31, 2023, 2022, and 2021 includes an expense of \$7,343, and credits of (\$1,344) and (\$307), respectively, related to revisions to asset retirement obligations. Refer to Note 15 for further disclosures related to asset retirement obligations.

As of December 31, 2023, the Company had unconditional purchase obligations for approximately \$48,557 of new equipment purchase commitments expected to be acquired at various dates in 2024.

(9) Other Non-Current Assets

Other non-current assets consisted of the following:

	December 31,	
	2023	2022
Advanced mining royalties	\$ 7,493	\$ 7,476
Long-term deposits	5,350	1,363
Equity method investments	31,670	23,070
Workers' compensation receivables	37,951	44,734
Goodwill	11,124	10,736
Other	12,898	15,816
Total other non-current assets	<u>\$ 106,486</u>	<u>\$ 103,195</u>

(10) Equity Method Investments

The Company holds a 65% partnership interest in Dominion Terminal Associates LLP ("DTA") which operates a ground storage-to-vessel coal transloading facility in Newport News, Virginia for use by its partners. As the Company shares power with its minority partner through equal management committee representation, the Company does not control DTA. Under the terms of operating and throughput and handling agreements, each partner is charged its share of cash operating costs in exchange for the right to use the facility's loading capacity and is required to make periodic cash advances to fund such costs.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

The Company's equity method investees do not have long-term debt obligations and the Company is not contingently obligated to make any future financing-related payments with respect to its equity method investees.

(11) Leases

The Company's lease population consists primarily of vehicle and heavy equipment leases and leases for office equipment. The Company's building and land leases relate to corporate office space and certain site offices. The Company determines whether a contract contains a lease based on whether the Company obtains the right to control the use of specifically identifiable property, plant, and equipment for a period of time in exchange for consideration. For the years ended December 31, 2023, 2022, and 2021 the Company identified no instances requiring significant judgment in determining whether any contracts entered into during the period were or were not leases. Additionally, the Company had no material sublease agreements within the scope of ASC 842 or lease agreements for which the Company was the lessor for the years ended December 31, 2023, 2022, and 2021.

Renewal options in the Company's lease population primarily relate to month-to-month extensions on vehicle leases and are immaterial both individually and in the aggregate. The Company includes renewal options that are reasonably certain to be exercised in the measurement of lease liabilities. As of December 31, 2023, the Company does not intend to exercise any termination options on existing leases.

As of December 31, 2023 and 2022, the Company had the following right-of-use assets and lease liabilities within the Company's Consolidated Balance Sheets:

		December 31, 2023	December 31, 2022
Assets	Balance Sheet Classification		
Financing lease assets	Property, plant, and equipment, net	\$ 5,949	\$ 5,429
Operating lease right-of-use assets	Other non-current assets	4,038	4,488
Total lease assets		<u>\$ 9,987</u>	<u>\$ 9,917</u>
Liabilities	Balance Sheet Classification		
Financing lease liabilities - current	Current portion of long-term debt	\$ 1,280	\$ 1,052
Operating lease liabilities - current	Accrued expenses and other current liabilities	572	612
Financing lease liabilities - long-term	Long-term debt	3,997	3,744
Operating lease liabilities - long-term	Other non-current liabilities	3,466	3,876
Total lease liabilities		<u>\$ 9,315</u>	<u>\$ 9,284</u>

Total lease costs and other lease information for the years ended December 31, 2023, 2022, and 2021 included the following:

	Year Ended December 31,		
	2023	2022	2021
Lease cost ⁽¹⁾			
Financing lease cost:			
Amortization of leased assets	\$ 1,444	\$ 2,644	\$ 2,061
Interest on lease liabilities	651	315	245
Operating lease cost	1,127	1,113	1,383
Short-term lease cost	1,315	1,234	786
Total lease cost	<u>\$ 4,537</u>	<u>\$ 5,306</u>	<u>\$ 4,475</u>

⁽¹⁾ The Company had no variable lease costs or sublease income for the years ended December 31, 2023, 2022, and 2021.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	Year Ended December 31,		
	2023	2022	2021
Other information			
Cash paid for amounts included in the measurement of lease liabilities	\$ 4,571	\$ 5,556	\$ 4,478
Operating cash flows from financing leases	\$ 651	\$ 315	\$ 245
Operating cash flows from operating leases	\$ 2,443	\$ 2,347	\$ 2,169
Financing cash flows from financing leases	\$ 1,477	\$ 2,894	\$ 2,064
Right-of-use assets obtained in exchange for new financing lease liabilities	\$ 1,891	\$ 4,728	\$ 703
Right-of-use assets obtained in exchange for new operating lease liabilities	\$ 206	\$ 48	\$ 275

Lease Term and Discount Rate			
Weighted-average remaining lease term in years - financing leases	5.10	5.90	1.75
Weighted-average remaining lease term in years - operating leases	6.30	7.10	7.88
Weighted-average discount rate - financing leases	12.3 %	13.5 %	9.6 %
Weighted-average discount rate - operating leases	11.4 %	11.6 %	11.3 %

The Company has elected to show net instead of gross amounts for right-of-use assets and liabilities within its Consolidated Statements of Cash Flows.

The following table summarizes the maturity of the Company's lease liabilities on an undiscounted cash flow basis and a reconciliation to the lease liabilities recognized in the Company's Consolidated Balance Sheets as of December 31, 2023:

	Financing Leases	Operating Leases
Lease cost		
2024	\$ 1,850	\$ 1,003
2025	1,740	952
2026	1,205	918
2027	646	747
2028	360	677
Thereafter	1,387	1,412
Total future minimum lease payments	\$ 7,188	\$ 5,709
Imputed interest	(1,911)	(1,671)
Present value of future minimum lease payments	\$ 5,277	\$ 4,038

As of December 31, 2023, the Company had no leases with future commencement dates that will create significant rights or obligations for the Company.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

(12) Accrued Expenses and Other Current Liabilities

Accrued expenses and other current liabilities consisted of the following:

	December 31,	
	2023	2022
Wages and benefits	\$ 62,811	\$ 69,458
Workers' compensation	10,482	11,651
Black lung	10,687	9,664
Taxes other than income taxes	31,236	24,959
Asset retirement obligations	38,915	36,963
Dividend payable	2,342	86,118
Freight accrual	8,461	7,181
Other	12,578	19,262
Total accrued expenses and other current liabilities	<u>\$ 177,512</u>	<u>\$ 265,256</u>

(13) Long-Term Debt

Long-term debt consisted of the following:

	December 31,	
	2023	2022
Notes payable and other	\$ 5,097	\$ 6,179
Financing leases	5,277	4,796
Total long-term debt	\$ 10,374	\$ 10,975
Less current portion	(3,582)	(3,078)
Long-term debt, net of current portion	<u>\$ 6,792</u>	<u>\$ 7,897</u>

Second Amended and Restated Asset-Based Revolving Credit Agreement

On December 6, 2021, the Company entered into the Second Amended and Restated Asset-Based Revolving Credit Agreement ("ABL Agreement") with Citibank N.A as administrative agent, collateral agent, swingline lender, and letter of credit ("LC") issuer and the other lenders party thereto (the "Lenders"), and BMO Harris Bank N.A and Eclipse Business Capital LLC as co-collateral agents. The ABL Agreement included a senior secured asset-based revolving credit facility (the "ABL Facility") under which the Company could borrow cash or obtain LCs, on a revolving basis, in an aggregate amount of up to \$155,000, of which no more than \$150,000 could represent outstanding LCs (\$125,000 on a committed basis and another \$25,000 on an uncommitted cash collateralized basis). The facility's maturity date was December 6, 2024. Under the terms of the ABL Agreement, LCs fees were calculated at 5.25%, while borrowings bore interest based on the character of the loan (defined as either secured overnight financing rate "SOFR" Loan ("SOFR Loan") or "Base Rate Loan") plus an applicable rate of 4.50% for SOFR Loans and 3.50% for Base Rate Loans. Pursuant to terms of the ABL Agreement, the Company elected the character of the loan, the interest period, and could provide notice of continuation or conversion of the borrowed principal amount with the ability to repay the borrowed principal amount in advance of the maturity date without penalty. As of December 31, 2022, no borrowings were outstanding under the ABL Facility.

Any LC issued under the ABL Facility bore a commitment fee rate of 0.50%, and a fronting fee of 0.25% of the face amount under each LC. As of December 31, 2022, the Company had \$61,877 LCs outstanding under the ABL Facility.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

New ABL Agreement

On October 27, 2023, the Company terminated its existing ABL Agreement and along with certain of its directly and indirectly owned subsidiaries (the “Borrowers”) entered into a new Credit Agreement (the “New ABL Agreement”) with Regions Bank, as lender, swingline lender, LC issuer, administrative agent, collateral agent, and lead arranger, along with ServisFirst Bank and Texas Capital Bank, as joint lead arrangers and the other lenders party thereto. In connection with the termination, the Company recorded a loss on extinguishment of debt of \$2,753 related to the write-off of unamortized debt issuance costs for and fees paid to exiting lenders. The New ABL Agreement continues to include an asset-based revolving credit facility (the “New ABL Facility”) which allows the Company to borrow cash or obtain LCs, on a revolving basis, in an aggregate amount of up to \$155,000. The Company may request an increase to the capacity of the facility of up to \$75,000 provided that \$25,000 may be solely for the purpose of providing additional availability to obtain cash collateralized LCs. Availability under the New ABL Facility is calculated monthly and fluctuates based on qualifying amounts of coal inventory, trade accounts receivable and in certain circumstances specified amounts of cash. The Company must maintain minimum Liquidity, as defined in the New ABL Agreement, of \$75,000. The New ABL Facility matures on October 27, 2027. As part of the transition from the previous ABL Facility to the New ABL Facility, the Company temporarily cash collateralized outstanding LCs until replacement LCs could be issued under the New ABL Facility. As of December 31, 2023, the Company had \$31 of cash collateralized LCs remaining to be replaced. During the first quarter of 2024, the remaining cash collateralized LCs from the previous ABL Facility were cancelled with no replacement required and the cash collateral was returned.

Under the terms of the New ABL Facility, LC fees will be calculated at 3.25% (including a fronting fee of 0.25%) while future borrowings will bear interest based on the character of the loan (defined as either a “Term Secured Overnight Financing Rate Loan” (or “Term SOFR Loan”) or a “Base Rate Loan”) plus an applicable rate of 3.10% for a Term SOFR Loan and 2.00% for a Base Rate Loan. The Company may elect the character and interest period for each loan. All amounts borrowed may be repaid prior to maturity without penalty. A commitment fee of 0.375% will be charged on any unused capacity. As of December 31, 2023, the Company had no amount borrowed and \$60,896 LCs outstanding under the New ABL Facility.

The New ABL Facility is guaranteed by substantially all of Alpha’s directly and indirectly owned subsidiaries that are not Borrowers (the “Guarantors”) and is secured by all or substantially all assets of the Borrowers and Guarantors. The New ABL Agreement and related documents contain negative and affirmative covenants including certain financial covenants. The Company is in compliance with all covenants under these agreements as of December 31, 2023.

Future Maturities

Future maturities of long-term debt as of December 31, 2023 are as follows:

2024	\$ 3,582
2025	3,425
2026	1,637
2027	451
2028	200
After 2028	1,079
Total long-term debt	<u>\$ 10,374</u>

(14) Acquisition-Related Obligations

Acquisition-related obligations consisted of the following:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	December 31,	
	2023	2022
Contingent Revenue Obligation	\$ —	\$ 27,719
Environmental Settlement Obligations	—	535
Total acquisition-related obligations	\$ —	\$ 28,254
Less current portion	—	(28,254)
Acquisition-related obligations, net of current portion	\$ —	\$ —

Contingent Revenue Obligation

As a result of the Merger, the Company assumed a contingent revenue payment obligation (the “Contingent Revenue Obligation”) to certain of the Merger Companies’ creditors pursuant to the terms stipulated within the bankruptcy settlement previously entered into by the Merger Companies. Pursuant to terms of the obligation, the annual obligation was limited to revenues derived from legacy operations for the Merger Companies and did not include revenues related to legacy Alpha Metallurgical Resources, Inc. operations. The Contingent Revenue Obligation consisted of a contingent revenue payment of 1.5% of annual gross revenues of the legacy operations for the Merger Companies up to \$500,000 and 1.0% of annual gross revenue of the legacy operations for the Merger Companies in excess of \$500,000 through the period ended December 31, 2022. During the first quarter of 2023, the Company paid the final calculated payment pursuant to terms of the Contingent Revenue Obligation. Refer to Note 16 for further disclosures related to the fair value assignment and methods used.

Refer to Note 20 for disclosures related to a Contingent Revenue Obligation repurchase transaction with a related party during the fourth quarter of 2021.

(15) Asset Retirement Obligations

The following table summarizes the changes in asset retirement obligations for the years ended December 31, 2023 and 2022:

Total asset retirement obligations at December 31, 2021	\$ 164,172
Accretion for the period	23,765
Sites added during the period	9,602
Revisions in estimated cash flows	304
Expenditures for the period	(18,832)
Total asset retirement obligations at December 31, 2022	\$ 179,011
Accretion for the period	25,500
Sites added during the period	204
Revisions in estimated cash flows ⁽¹⁾	20,946
Expenditures for the period	(20,237)
Total asset retirement obligations at December 31, 2023	\$ 205,424
Less current portion ⁽²⁾	(38,915)
Long-term portion	\$ 166,509

⁽¹⁾ The revisions in estimated cash flows resulted primarily from a decrease in the discount rate and changes in mine plans.

⁽²⁾ Included within Accrued expenses and other current liabilities on the Company’s Consolidated Balance Sheets. Refer to Note 12.

(16) Fair Value of Financial Instruments and Fair Value Measurements

The estimated fair values of financial instruments are determined based on relevant market information. These estimates involve uncertainty and cannot be determined with precision.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

The carrying amounts for cash and cash equivalents, trade accounts receivable, net, prepaid expenses and other current assets, restricted cash, deposits, trade accounts payable, notes payable and other, financing leases, accrued expenses and other current liabilities, and environmental settlement obligations approximate fair value as of December 31, 2023 and 2022 due to the short maturity of these instruments.

The following table sets forth by level, within the fair value hierarchy, the Company's financial and non-financial assets and liabilities that were accounted for at fair value on a recurring basis as of December 31, 2023 and 2022. Financial and non-financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company's assessment of the significance of a particular input to the fair value measurement requires judgment, and may affect the determination of fair value for assets and liabilities and their placement within the fair value hierarchy levels.

	December 31, 2023			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Trading securities ⁽¹⁾	\$ 40,597	\$ —	\$ 40,597	\$ —

⁽¹⁾ Classified as Long-term restricted investments on the Company's Consolidated Balance Sheets.

	December 31, 2022			
	Total Fair Value	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Contingent Revenue Obligation	\$ 27,719	\$ —	\$ —	\$ 27,719
Trading securities ⁽¹⁾	\$ 151,787	\$ —	\$ 151,787	\$ —

⁽¹⁾ Includes \$46,052 classified as Short-term investments and \$105,735 classified as Long-term restricted investments on the Company's Consolidated Balance Sheets.

The following tables are reconciliations of the financial and non-financial assets and liabilities that were accounted for at fair value on a recurring basis and that were categorized within Level 3 of the fair value hierarchy:

	December 31, 2022	Payments	Loss Recognized in Earnings	Transfer In (Out) of Level 3 Fair Value Hierarchy	December 31, 2023
Contingent Revenue Obligation	\$ 27,719	\$ (27,719)	\$ —	\$ —	\$ —

	December 31, 2021	Payments	Loss Recognized in Earnings	Transfer In (Out) of Level 3 Fair Value Hierarchy	December 31, 2022
Contingent Revenue Obligation	\$ 35,005	\$ (16,166)	\$ 8,880	\$ —	\$ 27,719

⁽¹⁾ The loss recognized in earnings resulted primarily from an increase in forecasted future revenue as of December 31, 2022.

The following methods and assumptions were used to estimate the fair values of the assets and liabilities in the tables above:

Level 2 Fair Value Measurements

Trading Securities - Typically includes certificates of deposit, corporate fixed income, and U.S. government securities. The fair values are obtained from a third-party pricing service provider. The fair values provided by the pricing service provider are based on observable market inputs including credit spreads and broker-dealer quotes, among other inputs. The Company classifies the prices obtained from the pricing services within Level 2 of the fair value hierarchy because the underlying inputs are directly observable from active markets. However, the pricing models used entail a certain amount of subjectivity and therefore differing judgments in how the underlying inputs are modeled could result in different estimates of fair value.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Level 3 Fair Value Measurements

Contingent Revenue Obligation - The fair value of the Contingent Revenue Obligation was estimated using a Black-Scholes pricing model. The inputs included in the Black-Scholes pricing model are the Company's forecasted future revenue, the stated royalty rate, the remaining periods in the obligation, annual risk-free interest rate based on the U.S. Constant Maturity Treasury Curve and annualized volatility. The annualized volatility was calculated by observing volatilities for comparable companies with adjustments for the Company's size and leverage. As the royalty period ended on December 31, 2022, the fair value of the remaining obligation as of that date represents the actual final calculated payment made during the first quarter of 2023. Refer to Note 14 for additional information.

(17) Income Taxes

Significant components of income tax expense (benefit) were as follows:

	Year Ended December 31,		
	2023	2022	2021
Current tax expense:			
Federal	\$ 80,254	\$ 114,106	\$ 2,422
State	3,527	6,620	1,149
Total current	\$ 83,781	\$ 120,726	\$ 3,571
Deferred tax expense (benefit):			
Federal	\$ 35,824	\$ (1,726)	\$ (3)
State	3,898	(12,795)	(160)
Total deferred	\$ 39,722	\$ (14,521)	\$ (163)
Total income tax expense (benefit):			
Federal	\$ 116,078	\$ 112,380	\$ 2,419
State	7,425	(6,175)	989
Total	<u>\$ 123,503</u>	<u>\$ 106,205</u>	<u>\$ 3,408</u>

A reconciliation of statutory federal income tax expense on income to the actual income tax expense is as follows:

	Year Ended December 31,		
	2023	2022	2021
Federal statutory income tax expense	\$ 177,547	\$ 326,497	\$ 61,362
Increase (decrease) in taxes due to:			
Percentage depletion allowance	(36,685)	(50,277)	(11,864)
Foreign-derived intangible income deduction	(24,291)	(69,917)	(1,453)
Change in valuation allowances	(5,658)	(119,082)	(78,043)
State taxes, net of federal tax impact	5,932	14,625	12,440
State apportioned tax rate change, net of federal tax impact	2,863	273	8,751
Capital loss carryforward expiration	—	140	10,552
Non-deductible compensation	9,934	5,573	1,429
Stock-based compensation	(6,968)	(3,588)	405
Other, net	829	1,961	(171)
Income tax expense	<u>\$ 123,503</u>	<u>\$ 106,205</u>	<u>\$ 3,408</u>

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

Deferred income taxes result from temporary differences between the reporting of amounts for financial statement purposes and income tax purposes. The net deferred tax assets and liabilities included in the Consolidated Balance Sheets include the following amounts:

	Year Ended December 31,	
	2023	2022
Deferred tax assets:		
Asset retirement obligations	\$ 44,600	\$ 39,200
Reserves and accruals not currently deductible	8,141	10,572
Workers' compensation and black lung obligations	39,432	38,099
Pension obligations	18,409	23,826
Equity method investments	1,271	1,555
Net operating loss carryforwards	35,835	43,716
Capital loss carryforwards	45,491	48,940
Acquisition-related obligations	—	6,194
Other	9,496	7,171
Gross deferred tax assets	202,675	219,273
Less valuation allowance	(48,143)	(53,801)
Deferred tax assets	\$ 154,532	\$ 165,472
Deferred tax liabilities:		
Property, plant and mineral reserves	\$ (172,336)	\$ (148,189)
Acquired intangibles, net	(9,478)	(11,995)
Prepaid expenses	(3,658)	(4,215)
Restricted cash	—	(556)
Other	(174)	(13)
Total deferred tax liabilities	(185,646)	(164,968)
Net deferred tax (liabilities) assets	\$ (31,114)	\$ 504

Changes in the valuation allowance were as follows:

	Year Ended December 31,		
	2023	2022	2021
Valuation allowance beginning of period	\$ 53,801	\$ 172,883	\$ 263,387
Decrease in valuation allowance recorded to income tax expense	(5,658)	(119,082)	(78,043)
Decrease in valuation allowance not affecting income tax expense	—	—	(12,461)
Valuation allowance end of period	\$ 48,143	\$ 53,801	\$ 172,883

At December 31, 2023, the Company has recorded a deferred tax asset of \$26,494 for federal net operating loss carryforwards, which represents the tax-effected amount of net operating loss carryforwards mathematically available for utilization prior to statutory expiration. Underlying this deferred tax asset are approximately \$12,000 of gross federal net operating loss carryforwards that are subject to an annual Internal Revenue Code Section 382 limitation of approximately \$1,000 and approximately \$114,000 of gross federal net operating loss carryforwards that are subject to an annual Internal Revenue Code Section 382 limitation of approximately \$17,500. These federal net operating loss carryforwards were generated before 2018 and will expire between years 2035 and 2037. The Company has a gross federal capital loss carryforward of approximately \$208,000. The capital loss carryforward will expire in 2025. A valuation allowance is recorded against the federal and state capital loss carryforwards and certain state net operating loss carryforwards.

The Company has no liability for uncertain tax positions for the years ended December 31, 2023, 2022, and 2021.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

The Company's policy is to classify interest and penalties related to uncertain tax positions as part of income tax expense. As of December 31, 2023 and 2022, the Company had no accrued interest and penalties.

As of December 31, 2023, tax years 2020 – 2023 remain open to federal and state examination. During the third quarter of 2021, the IRS concluded its audit of the Company's 2016 federal income tax return and associated net operating loss ("NOL") carryback claim. The audit conclusion did not result in any material impact to the financial statements or related disclosures. Following the conclusion of the audit, the Company received the \$64,160 carryback claim tax refund and \$5,425 of accrued interest.

On August 16, 2022, the Inflation Reduction Act of 2022 ("IRA") was signed into law. Among other provisions, the IRA enacted a 15% corporate alternative minimum tax and a 1% excise tax on repurchases of corporate stock for tax years beginning after December 31, 2022. The Company determined that it is not subject to the corporate alternative minimum tax for the year ended December 31, 2023. Refer to Note 7 for information on the excise tax on repurchases of the Company's corporate stock.

(18) Employee Benefit Plans

The Company provides several types of benefits for its employees, including a defined benefit and defined contribution pension plan, workers' compensation and black lung benefits, and postretirement life insurance. The Company does not participate in any multi-employer plans. The components of net periodic benefit cost (credit) other than the service cost component for black lung are included in the line item Miscellaneous (expense) income, net, in the Consolidated Statements of Operations.

Company Administered Defined Benefit Pension Plan

In connection with the Merger, the Company assumed three qualified non-contributory defined benefit pension plans, which covered certain salaried and non-union hourly employees. The qualified non-contributory defined benefit pension plans were collectively referred to as the "Pension Plans." Effective as of December 31, 2023, the assets and liabilities of the Pension Plans were merged into one qualified non-contributory defined benefit pension plan ("Pension Plan"). Benefits are frozen under the Pension Plan. Participants accrued benefits either based on certain formulas, the participant's compensation prior to retirement, or plan specified amounts for each year of service with the Company. The Pension Plan utilizes a cash balance formula for certain of its participants. The cash balance formula provides guaranteed rates of interest on accumulated balances of 6% for balances accumulated prior to 2004 and 4% on balances accumulated thereafter.

Annual funding contributions to the Pension Plan are made as recommended by consulting actuaries based upon the ERISA funding standards. Projected contributions are based on the latest available data and include the impact of the funding relief granted by the American Rescue Plan Act ("ARPA") and the application of the interest rate stabilization guidance under ARPA. Plan assets consist of equity securities, fixed income funds, commingled short-term funds, private equity funds, and a guaranteed insurance contract.

The Pension Plan offers certain eligible participants the option to elect to receive lump sum benefits, which resulted in a partial plan settlement and the accelerated recognition of a portion of the accumulated other comprehensive loss during the years ended December 31, 2022 and 2021. Refer to the disclosures below for further information on the partial plan settlements.

The following tables set forth the Pension Plan's accumulated benefit obligation, fair value of plan assets and funded status for the years ended December 31, 2023 and 2022.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	Year Ended December 31,	
	2023	2022
Change in benefit obligations:		
Accumulated benefit obligation at beginning of period:	\$ 468,442	\$ 668,055
Interest cost	23,973	15,981
Actuarial loss (gain)	18,239	(182,441)
Benefits paid	(32,288)	(30,378)
Settlement	—	(2,775)
Accumulated benefit obligation at end of period	<u>\$ 478,366</u>	<u>\$ 468,442</u>
Change in fair value of plan assets:		
Fair value of plan assets at beginning of period	\$ 357,606	\$ 508,125
Actual return on plan assets	26,129	(120,796)
Employer contributions	25,011	3,430
Benefits paid	(32,288)	(30,378)
Settlement	—	(2,775)
Fair value of plan assets at end of period	<u>\$ 376,458</u>	<u>\$ 357,606</u>
Funded status	<u>\$ (101,908)</u>	<u>\$ (110,836)</u>
Accrued benefit cost at end of period ⁽¹⁾	<u>\$ (101,908)</u>	<u>\$ (110,836)</u>

⁽¹⁾ Amounts are classified as long-term on the Consolidated Balance Sheets as there are sufficient plan assets to make expected benefit payments to plan participants in the succeeding twelve months.

Gross amounts related to benefit obligations recognized in accumulated other comprehensive loss consisted of the following as of December 31, 2023 and 2022:

	December 31,	
	2023	2022
Net actuarial loss	\$ 26,059	\$ 12,683

The following table details the components of net periodic benefit cost (credit):

	Year Ended December 31,		
	2023	2022	2021
Interest cost	\$ 23,973	\$ 15,981	\$ 13,566
Expected return on plan assets	(21,996)	(28,733)	(28,732)
Amortization of net actuarial loss	730	2,111	3,217
Settlement	—	244	412
Net periodic benefit cost (credit)	<u>\$ 2,707</u>	<u>\$ (10,397)</u>	<u>\$ (11,537)</u>

Other changes in plan assets and benefit obligation recognized in other comprehensive income (loss) are as follows:

	Year Ended December 31,		
	2023	2022	2021
Actuarial loss (gain) ⁽¹⁾	\$ 14,106	\$ (32,912)	\$ (37,004)
Amortization of net actuarial loss	(730)	(2,111)	(3,217)
Settlement	—	(244)	(412)
Total recognized in other comprehensive income (loss)	<u>\$ 13,376</u>	<u>\$ (35,267)</u>	<u>\$ (40,633)</u>

⁽¹⁾ For the year ended December 31, 2023, the actuarial loss was primarily attributable to a decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligation. For the year ended December 31, 2022, the

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

actuarial gain was primarily attributable to an increase in the weighted-average discount rate actuarial assumption used in determining the benefit obligation partially offset by the loss on plan assets.

The following table presents information applicable to plans with accumulated benefit obligations in excess of plan assets:

	Year Ended December 31,	
	2023	2022
Projected benefit obligation	\$ 478,366	\$ 468,442
Accumulated benefit obligation	\$ 478,366	\$ 468,442
Fair value of plan assets	\$ 376,458	\$ 357,606

The weighted-average actuarial assumption used in determining the benefit obligation as of December 31, 2023 and 2022 was as follows:

	December 31,	
	2023	2022
Discount rate	5.10%	5.42%

The weighted-average actuarial assumptions used to determine net periodic benefit cost (credit) for the years ended December 31, 2023, 2022, and 2021 were as follows:

	Year Ended December 31,		
	2023	2022	2021
Discount rate for benefit obligation	5.42 %	2.92 %	2.62 %
Discount rate for interest cost	5.27 %	2.44 %	1.96 %
Expected long-term rate of return on plan assets	6.20 %	5.80 %	5.80 %

The discount rate assumptions were determined from a high-quality corporate bond yield-curve timing of the Company's projected cash out flows.

The expected long-term rate of return on assets of the Pension Plan is established each year in consultation with the plan's actuaries and outside investment advisors. This rate is determined by taking into consideration the Pension Plan's target asset allocation, expected long-term rates of return on each major asset class by reference to long-term historic ranges, inflation assumptions, and the expected additional value from active management of the Pension Plan's assets. For the determination of net periodic benefit cost in 2024, the Company will utilize an expected long-term rate of return on plan assets of 6.20%.

Assets of the Pension Plan are held in trusts and are invested in accordance with investment guidelines that have been established by the Company's Benefits Committee in consultation with outside investment advisors. The target allocation for 2024 and the actual asset allocation as reported at December 31, 2023 are as follows:

	Target Allocation Percentages 2024	Percentage of Plan Assets 2023
Equity securities	58.0 %	54.0 %
Fixed income funds	42.0 %	42.0 %
Other	— %	4.0 %
Total	100.0 %	100.0 %

The asset allocation targets have been set with the expectation that the Pension Plan's assets will fund the expected liability within an appropriate level of risk. In determining the appropriate target asset allocations, the Benefits Committee considers the demographics of the Pension Plan's participants, the funded status of the plan, the Company's contribution philosophy, the Company's business and financial profile, and other associated risk factors. The Pension Plan's assets are periodically rebalanced among the major asset categories to maintain the asset allocation within a specified range of the target allocation percentage. The target allocation between equity securities and fixed income funds is determined by reference to the funded status percentage for the Pension Plan. The plan administrator uses a one-way de-risking glide path whereby the fixed income

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

funds allocation increases as the funded status improves. At a 90.0% funded status level, the glide path calls for a 50/50 equity securities and fixed income funds mix. During the year ended December 31, 2021, one of the Pension Plans' funded status levels reached 90.0% and the related plan assets were adjusted accordingly to the new allocation.

The Company contributed \$25,011 to the Pension Plan during the year ended December 31, 2023. The Company expects to contribute \$25,000 to the Pension Plan in 2024, which includes amounts above the estimated minimum required contributions for the 2024 plan year.

The following represents expected future pension benefit payments for the next ten years:

2024	\$ 31,491
2025	31,496
2026	31,392
2027	31,333
2028	31,180
2029-2033	152,086
	<u>\$ 308,978</u>

The fair values of the Company's Pension Plan's assets as of December 31, 2023, by asset category are as follows:

Asset Category	Total	Quoted Market Prices in Active Market for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Equity securities:				
Multi-asset fund ⁽¹⁾	\$ 205,181	\$ —	\$ 205,181	\$ —
Fixed income funds:				
Bond fund ⁽²⁾	156,235	—	156,235	—
Commingled short-term fund ⁽³⁾	1,307	—	1,307	—
Other types of investments:				
Guaranteed insurance contract	12,230	—	—	12,230
Total	\$ 374,953	\$ —	\$ 362,723	\$ 12,230
Receivable ⁽⁴⁾	849			
Total assets at fair value	375,802			
Private equity funds measured at net asset value practical expedient ⁽⁵⁾	656			
Total plan assets	<u>\$ 376,458</u>			

⁽¹⁾ This fund contains equities (domestic and international), real estate and bonds.

⁽²⁾ This fund contains bonds representing a diversity of sectors and maturities. This fund also includes mortgage-backed securities and U.S. Treasuries.

⁽³⁾ This fund contains cash and highly liquid short-term investments in a collective investment fund.

⁽⁴⁾ Receivable for investments sold at December 31, 2023, which approximates fair value.

⁽⁵⁾ In accordance with Accounting Standards Update 2015-07, investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the total value of assets of the plans.

Changes in Level 3 plan assets for the period ended December 31, 2023 were as follows:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	Guaranteed Insurance Contract
Beginning balance, December 31, 2022	\$ 11,912
Actual return on plan assets:	
Relating to assets still held at the reporting date	596
Purchases, sales and settlements	(278)
Ending balance, December 31, 2023	\$ 12,230

The fair values of the Company's Pension Plan's assets as of December 31, 2022, by asset category are as follows:

Asset Category	Total	Quoted Market Prices in Active Market for Identical Assets (Level 1)	Significant Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Equity securities:				
Multi-asset fund ⁽¹⁾	\$ 198,262	\$ —	\$ 198,262	\$ —
Fixed income funds:				
Bond fund ⁽²⁾	144,197	—	144,197	—
Commingled short-term fund ⁽³⁾	1,339	—	1,339	—
Other types of investments:				
Guaranteed insurance contract	11,912	—	—	11,912
Total	\$ 355,710	\$ —	\$ 343,798	\$ 11,912
Receivable ⁽⁴⁾	1,145			
Total assets at fair value	356,855			
Private equity funds measured at net asset value practical expedient ⁽⁵⁾	751			
Total plan assets	\$ 357,606			

⁽¹⁾ This fund contains equities (domestic and international), real estate and bonds.

⁽²⁾ This fund contains bonds representing a diversity of sectors and maturities. This fund also includes mortgage-backed securities and U.S. Treasuries.

⁽³⁾ This fund contains cash and highly liquid short-term investments in a collective investment fund.

⁽⁴⁾ Receivable for investments sold at December 31, 2022, which approximates fair value.

⁽⁵⁾ In accordance with Accounting Standards Update 2015-07, investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the total value of assets of the plans.

Changes in Level 3 plan assets for the period ended December 31, 2022 were as follows:

	Fair Value Measurements Using Significant Unobservable Inputs (Level 3)
	Guaranteed Insurance Contract
Beginning balance, December 31, 2021	\$ 11,652
Actual return on plan assets:	
Relating to assets still held at the reporting date	562
Purchases, sales and settlements	(302)
Ending balance, December 31, 2022	\$ 11,912

The following is a description of the valuation methodologies used for assets measured at fair value:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Level 1 Plan Assets: Assets consist of individual security positions that are easily traded on recognized market exchanges. These securities are priced and traded daily, and therefore the fund is valued daily.

Level 2 Plan Assets: Funds consist of individual security positions that are mostly securities easily traded on recognized market exchanges. These securities are priced and traded daily, and therefore the fund is valued daily.

Level 3 Plan Assets: Assets are valued monthly or quarterly based on the Market Value provided by managers of the underlying fund investments. The Market Value provided typically reflects the fair value of each underlying fund investment, including unrealized gains and losses.

Workers' Compensation and Pneumoconiosis (Black Lung)

The Company is required by federal and state statutes to provide benefits to employees for awards related to workers' compensation and black lung.

The Company's subsidiaries utilize high-deductible third-party insurance for worker's compensation and black lung obligations with the exception of certain subsidiaries in which the Company is a qualified self-insurer for workers' compensation and/or black lung obligations. The Company's subsidiaries that are self-insured for black lung benefits may fund certain benefit payments through a Section 501(c) (21) tax-exempt trust fund.

Pursuant to the Merger Agreement, the Company assumed a reinsurance contract with a third party. In 2017, the Merger Companies made a lump sum payment in exchange for a reinsurance company's agreement to administer and pay certain future workers' compensation and state black lung obligations in the state of Kentucky. Pursuant to the Merger Agreement, the Company assumed the estimated liability for these future claims. As the liabilities are paid by the insurance company, the prepaid insurance amounts will be reduced by a corresponding amount.

The Company accrues for workers' compensation liability by recognizing costs when it is probable that a covered liability has been incurred and the cost can be reasonably estimated. The Company's estimates of these costs are adjusted based upon actuarial studies and include a provision for incurred but not reported losses. Actual losses may differ from these estimates, which could increase or decrease the Company's costs. Additionally, the liability for black lung benefits is estimated by an independent actuary by prorating the accrual of actuarially projected benefits over the employee's applicable term of service. Adjustments to the probable ultimate liability for workers' compensation and black lung are made annually based on actuarial valuations.

For the Company's subsidiaries that are insured with a high-deductible insurance plan for workers' compensation and black lung claims, the insurance premium expense for the years ended December 31, 2023, 2022 and 2021 was \$10,676, \$9,274, and \$8,630, respectively.

Workers' Compensation

The table below presents workers' compensation amounts recognized in the Consolidated Balance Sheets:

	December 31,	
	2023	2022
Current liabilities	\$ 10,482	\$ 11,651
Long-term liabilities	92,655	107,028
Total liabilities	\$ 103,137	\$ 118,679
Less expected insurance receivable ⁽¹⁾	(39,920)	(46,866)
Workers' compensation obligations, net of expected insurance receivables	\$ 63,217	\$ 71,813

⁽¹⁾ Included within Prepaid expenses and other current assets and Other non-current assets in the Consolidated Balance Sheets.

Workers' compensation (credit) expense for high-deductible insurance plans for the years ended December 31, 2023, 2022, and 2021 was (\$271), (\$1,995), and \$664, respectively, included within Cost of coal sales in the Consolidated Statements of Operations.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Black Lung

The following tables set forth the accumulated black lung benefit obligations, fair value of plan assets and funded status for the years ended December 31, 2023 and 2022:

	Year Ended December 31,	
	2023	2022
Change in benefit obligation:		
Accumulated benefit obligation at beginning of period	\$ 93,421	\$ 117,142
Service cost	2,051	2,642
Interest cost	4,660	2,722
Actuarial loss (gain)	20,019	(21,060)
Benefits paid	(10,280)	(8,025)
Accumulated benefit obligation at end of period	<u>\$ 109,871</u>	<u>\$ 93,421</u>
Change in fair value of plan assets:		
Fair value of plan assets at beginning of period	\$ 2,538	\$ 2,664
Actual return on plan assets	75	(126)
Benefits paid	(10,280)	(8,025)
Employer contributions	10,280	8,025
Fair value of plan assets at end of period ⁽¹⁾	<u>2,613</u>	<u>2,538</u>
Funded status	<u>\$ (107,258)</u>	<u>\$ (90,883)</u>
Accrued benefit cost at end of period	<u>\$ (107,258)</u>	<u>\$ (90,883)</u>

⁽¹⁾ Assets of the plan are held in a Section 501(c)(21) tax-exempt trust fund and consist primarily of government debt securities. All assets are classified as Level 1 and valued based on quoted market prices.

The table below presents amounts recognized in the Consolidated Balance Sheets:

	December 31,	
	2023	2022
Current liabilities	\$ 10,687	\$ 9,664
Long-term liabilities	96,571	81,219
Total liabilities	<u>\$ 107,258</u>	<u>\$ 90,883</u>

Gross amounts related to the black lung benefit obligations recognized in accumulated other comprehensive loss consisted of the following as of December 31, 2023 and 2022:

	December 31,	
	2023	2022
Net actuarial loss (gain)	\$ 12,630	\$ (10,198)

The following table details the components of the net periodic benefit cost for the black lung benefit obligations:

	Year Ended December 31,		
	2023	2022	2021
Service cost	\$ 2,051	\$ 2,642	\$ 2,972
Interest cost	4,660	2,722	2,463
Expected return on plan assets	(50)	(53)	(54)
Amortization of net actuarial (gain) loss	(2,833)	1,257	2,453
Net periodic benefit cost	<u>\$ 3,828</u>	<u>\$ 6,568</u>	<u>\$ 7,834</u>

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Other changes in the black lung plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows:

	Year Ended December 31,		
	2023	2022	2021
Actuarial loss (gain) ⁽¹⁾	\$ 19,995	\$ (20,881)	\$ (9,649)
Amortization of net actuarial gain (loss)	2,833	(1,257)	(2,453)
Total recognized in other comprehensive income (loss)	\$ 22,828	\$ (22,138)	\$ (12,102)

⁽¹⁾ For the year ended December 31, 2023, the actuarial loss was primarily attributable to a decrease in the weighted-average discount rate actuarial assumption used in determining the benefit obligations and an increase in new claimants. For the year ended December 31, 2022, the actuarial gain was primarily attributable to an increase in the weighted-average discount rate actuarial assumption used in determining the benefit obligations.

The weighted-average assumptions related to black lung obligations used to determine the benefit obligation as of December 31, 2023 and 2022 were as follows:

	December 31,	
	2023	2022
Discount rate	5.13 %	5.42 %
Federal black lung income benefit trend rate	2.50 %	2.50 %
Federal black lung medical benefit trend rate	5.00 %	5.00 %

The weighted-average assumptions related to black lung benefit obligations used to determine net periodic benefit cost were as follows:

	Year Ended December 31,		
	2023	2022	2021
Discount rate for benefit obligation	5.42 %	2.96 %	2.75 %
Discount rate for service cost	5.58 %	3.24 %	3.15 %
Discount rate for interest cost	5.23 %	2.37 %	1.96 %
Federal black lung income benefit trend rate	2.50 %	2.50 %	2.00 %
Federal black lung medical benefit trend rate	5.00 %	5.00 %	5.00 %
Expected return on plan assets	2.00 %	2.00 %	2.00 %

Estimated future cash payments related to black lung benefit obligations for the next 10 years ending after December 31, 2023 are as follows:

Year ending December 31:	
2024	\$ 10,687
2025	10,301
2026	10,082
2027	9,937
2028	9,857
2029-2033	24,037
	<u>\$ 74,901</u>

Postretirement Life Insurance Benefits

As part of the Alpha Natural Resources, Inc. bankruptcy reorganization process and the Retiree Committee Settlement Agreement, the Company assumed the unfunded liability for life insurance benefits for certain disabled and non-union retired

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

employees. Provisions are made for estimated benefits and adjustments to the probable ultimate liabilities are made annually based on an actuarial study prepared by independent actuaries. As of December 31, 2023 and 2022, the postretirement life insurance benefit obligation was \$8,857, including a current portion of \$613, and \$8,761, including a current portion of \$648, respectively, which are included in the Consolidated Balance Sheets as Other non-current liabilities and Accrued expenses and other current liabilities.

Defined Contribution and Profit-Sharing Plans

The Company sponsors defined contribution plans to assist its eligible employees in providing for retirement. Generally, under the terms of these plans, employees make voluntary contributions through payroll deductions and the Company makes matching and/or discretionary contributions, as defined by each plan. The Company's total contributions to these plans for the years ended December 31, 2023, 2022, and 2021 were \$16,435, \$19,385, and \$10,275, respectively.

During the third quarter of 2022, the Company announced a year-end discretionary employer contribution under the Alpha Metallurgical Resources 401(k) Retirement Savings Plan (the "Plan") equal to the 2% of the Plan participants' annual salaries. Effective in June 2021, the Company's matching contributions under the Plan were reinstated after being suspended due to weak market conditions during the second quarter of 2020.

Self-insured Medical Plan

The Company is self-insured for health benefit coverage for all of its active employees. Estimated liabilities for health and medical claims are recorded based on the Company's historical experience and include a component for incurred but not paid claims. During the years ended December 31, 2023, 2022, and 2021, the Company incurred total expenses of \$86,745, \$68,706, and \$62,351, respectively, which primarily include claims processed and an estimate for claims incurred but not paid.

(19) Stock-Based Compensation Awards

The MIP is currently authorized for the issuance of awards of up to 1,201,202 shares of common stock, and as of December 31, 2023, there were 90,970 shares of common stock available for grant under the MIP. The LTIP is currently authorized for the issuance of awards of up to 1,500,000 shares of common stock, and as of December 31, 2023, there were 819,305 shares of common stock available for grant under the LTIP. Pursuant to the Merger Agreement, the Company assumed the ANR Inc. 2017 Equity Incentive Plan (the "ANR EIP"), which had underlying ANR shares that were converted to 89,766 Contura Energy, Inc. shares. The ANR EIP is not authorized for additional issuance of awards of shares of common stock, and as of December 31, 2023, there were no shares of common stock available for grant under the ANR EIP.

As of December 31, 2023, the Company had three types of stock-based awards outstanding: time-based restricted stock units, performance-based restricted stock units, and performance-based cash awards. Upon vesting and settlement or exercise of the stock-based awards outstanding, the Company issues authorized and unissued shares of the Company's common stock to the recipient. Stock-based compensation expense totaled \$20,856, \$9,841, and \$7,468 for the years ended December 31, 2023, 2022, and 2021, respectively. For the years ended December 31, 2023, 2022, and 2021, approximately 95%, 92%, and 89%, respectively, of stock-based compensation expense was reported as selling, general and administrative expenses, and the remainder was recorded as cost of coal sales.

The Company is authorized to repurchase common shares from employees (upon the election by the employee) to satisfy the employees' statutory tax withholdings upon the vesting of stock grants. Shares that are repurchased to satisfy the employees' statutory tax withholdings are recorded in treasury stock at cost. During the year ended December 31, 2023, the Company repurchased 81,287 shares of its common stock issued pursuant to awards under the MIP and LTIP for a total purchase amount of \$17,333, or \$213.23 average price paid per share. During the year ended December 31, 2022, the Company repurchased 94,460 shares of its common stock issued pursuant to awards under the MIP and LTIP for a total purchase amount of \$7,867, or \$83.28 average price paid per share. During the year ended December 31, 2021, the Company repurchased 50,363 shares of its common stock issued pursuant to awards under the MIP and LTIP for a total purchase amount of \$785, or \$15.60 average price paid per share.

On November 8, 2023, the Company modified the terms of certain outstanding stock-based compensation awards previously granted to Mr. Stetson, the executive chair of the Board. Pursuant to the terms of the modification, upon the completion of his service as executive chair as of the end of the day on December 31, 2023, and his appointment by the Board

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

as non-executive chair of the Board effective as of January 1, 2024, the pro-rata vesting of his outstanding incentive awards was to be calculated as if his separation date were instead December 31, 2024. The modification resulted in total incremental compensation cost of \$6,717 for the year ended December 31, 2023 and impacted the time-based restricted stock units and performance-based restricted stock units granted to him under the LTIP during the years ended December 31, 2023 and 2022. Awards held by other employees were not affected by the modification. As all modified awards are fully vested, there is no remaining compensation cost to be recognized as of December 31, 2023.

2023 Awards Granted

During the year ended December 31, 2023, the Company granted certain key employees and non-employee directors 35,018 time-based restricted stock units under the LTIP with a weighted average grant date fair value of \$165.43 based on the Company's closing stock price at the trading day before the date of the grant. Awards granted to key employees on January 25, 2023 will vest ratably over a three-year period from the date of the grant in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date. Per the terms of the transition agreement between Mr. Stetson and the Company, dated November 18, 2022, relating to his service as the Company's executive chair of the Board, and then as its non-executive chair, awards granted to Mr. Stetson were to vest pro-rata as of December 31, 2023, the last day of his service as the Company's executive chair, reflecting his service through that date. The transition agreement was later amended as discussed above. Restricted stock units were also granted to a non-employee director on February 2, 2023, which vested on May 2, 2023, and to multiple non-employee directors on May 3, 2023, which will vest on the first to occur of (i) May 2, 2024, (ii) the director's separation of service due to the director's death or physical or mental incapacity to perform his or her usual duties, (iii) the director's service as a member of the Board is terminated, for any reason other than removal for cause, as of a date that is more than six months after the date of grant, and (iv) a change in control.

Additionally, during the year ended December 31, 2023, the Company granted certain key employees 49,701 performance-based restricted stock units under the LTIP, which represent the number of shares of common stock that may be issued based on the achievement of targeted performance levels related to pre-established relative total shareholder return goals and annually determined operational goals over a three year period. These awards are scheduled to cliff vest on the third anniversary of the date of the grant, subject to the participant's continuous service with the Company through the applicable vesting date and the satisfaction of the performance criteria. Per the terms of the transition agreement between Mr. Stetson and the Company, dated November 18, 2022, relating to his service as the Company's executive chair of the Board, and then as its non-executive chair, the awards granted to Mr. Stetson were to vest pro-rata as of December 31, 2023, the last day of his service as the Company's executive chair, reflecting his service through that date. The transition agreement was later amended as discussed above. The performance-based restricted stock units have the potential to be earned from 0% to 200% of the targeted performance level, depending on actual results. Upon vesting and settlement of these awards, the Company will issue authorized and previously unissued shares of the Company's common stock to the recipient. The 29,816 operational performance-based restricted stock units were valued based on the Company's closing stock price on the trading day before the date of the grant and had a weighted average grant date fair value of \$171.07. For the awards with operational performance conditions, the Company reassesses at each reporting date whether achievement of each of the performance conditions was probable and adjusts the accrual of stock-based compensation expense as needed. Of the 19,885 relative total shareholder return performance-based restricted stock units, 2,093 were valued based on the Company's closing stock price on the trading day before the date of the grant and had a weighted average grant date fair value of \$171.07, and 17,792 were valued relative to the stock price performance of a comparator group and had a weighted average grant date fair value of \$267.18 based on a Monte Carlo simulation. The Monte Carlo simulation incorporated the assumptions as presented in the following table:

Relative performance-based restricted stock units		
Start price ⁽¹⁾	\$	151.35
Valuation date stock price ⁽²⁾	\$	176.44
Expected volatility ⁽³⁾		102.06 %
Risk-free interest rate ⁽⁴⁾		3.82 %
Expected dividend yield ⁽⁵⁾		— %

⁽¹⁾ The start price for the Company represented the average closing stock price over the twenty trading days ending on December 31, 2022, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.

⁽²⁾ The valuation date stock price represented the closing value on the grant date.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

- (3) The expected volatility assumption was based on the historical volatility of the price of the Company's stock.
- (4) The annual risk-free interest rate equaled the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that had a term equal to the length of the remaining performance measurement period as of the valuation date.
- (5) The expected dividend yield represented the investments return to a share of the Company's stock that is not available to the holder of the performance-based restricted stock unit.

2022 Awards Granted

During the year ended December 31, 2022, the Company granted certain key employees and non-employee directors 95,111 time-based restricted stock units under the MIP and LTIP with a weighted average grant date fair value of \$96.60 based on the Company's closing stock price at the trading day before the date of the grant. Awards granted to key employees on January 25, 2022 will vest ratably over a three-year period from the date of the grant in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date. Restricted stock units were also granted to non-employee directors on May 3, 2022, which vested on May 2, 2023. An award granted to Mr. Stetson, the Chief Executive Officer ("CEO"), on November 18, 2022, in advance of his transition to executive chair of the Board on January 1, 2023, vested over the course of 2023 in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date.

Additionally, during the year ended December 31, 2022, the Company granted certain key employees 60,857 performance-based restricted stock units under the LTIP, which represent the number of shares of common stock that may be issued based on the achievement of targeted performance levels related to pre-established relative total shareholder return goals and annually determined operational goals over a three year period. These awards are scheduled to cliff vest on the third anniversary of the date of the grant, subject to the participant's continuous service with the Company through the applicable vesting date and the satisfaction of the performance criteria. These performance-based restricted stock units have the potential to be earned from 0% to 200% of the targeted performance level, depending on actual results. Upon vesting and settlement of these awards, the Company will issue authorized and previously unissued shares of the Company's common stock to the recipient. The 36,515 operational performance-based restricted stock units were valued based on the Company's closing stock price on the trading day before the date of the grant and had a weighted average grant date fair value of \$60.37. For the awards with operational performance conditions, the Company reassesses at each reporting date whether achievement of each of the performance conditions was probable and adjusts the accrual of stock-based compensation expense as needed. The 24,342 relative total shareholder return performance-based restricted stock units were valued relative to the stock price performance of a comparator group and had a weighted average grant date fair value of \$97.33 based on a Monte Carlo simulation. The Monte Carlo simulation incorporated the assumptions as presented in the following table:

Relative performance-based restricted stock units		
Start price ⁽¹⁾	\$	53.29
Valuation date stock price ⁽²⁾	\$	61.09
Expected volatility ⁽³⁾		106.48 %
Risk-free interest rate ⁽⁴⁾		1.26 %
Expected dividend yield ⁽⁵⁾		— %

- (1) The start price for the Company represented the average closing stock price over the twenty trading days ending on December 31, 2021, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.
- (2) The valuation date stock price represented the closing price on the grant date.
- (3) The expected volatility assumption was based on the historical volatility of the price of the Company's stock.
- (4) The annual risk-free interest rate equaled the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that had a term equal to the length of the remaining performance measurement period as of the valuation date.
- (5) The expected dividend yield represented the investments return to a share of the Company's stock that is not available to the holder of the performance-based restricted stock unit.

Additionally, during the year ended December 31, 2022, the Company granted certain key employees performance-based cash incentive awards under the LTIP with a target award amount of \$1,105. The cash to be awarded is based on the

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES

Notes to Consolidated Financial Statements

(Amounts in thousands except share and per share data)

achievement of pre-established relative total shareholder return goals over a three-year period. These awards are scheduled to cliff vest on the third anniversary of the date of the grant, subject to the participant's continuous service with the Company through the applicable vesting date and the satisfaction of the performance criteria. These awards have the potential to be distributed from 0% to 200% of the targeted performance level, depending on actual results. Upon vesting of these awards, the Company issues cash to the recipient. These awards are classified as a liability, and the Company reassesses at each reporting date the fair value of the award and adjusts the accruals of stock-based compensation expense as appropriate based on a Monte Carlo simulation. As of December 31, 2023 and 2022, the liability for these awards totaled \$1,233 and \$374, respectively. The performance-based cash incentive awards were valued relative to the stock price performance of a comparator group and had a weighted average grant date fair value as a percent of target dollar value of 61.97% based on a Monte Carlo simulation. The Monte Carlo simulation incorporates the assumptions as presented in the following table:

<i>Performance-based cash incentive awards</i>		
Start price ⁽¹⁾	\$	53.29
Valuation date stock price ⁽²⁾	\$	61.09
Expected volatility ⁽³⁾		106.48 %
Risk-free interest rate ⁽⁴⁾		1.26 %
Expected dividend yield ⁽⁵⁾		— %

- (1) The start price for the Company represented the average closing stock price over the twenty trading days ending on December 31, 2021, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.
- (2) The valuation date stock price represented the closing price on the grant date.
- (3) The expected volatility assumption was based on the historical volatility of the price of the Company's stock.
- (4) The annual risk-free interest rate equaled the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that had a term equal to the length of the remaining performance measurement period as of the valuation date.
- (5) The expected dividend yield represented the investments return to a share of the Company's stock that is not available to the holder of the performance-based restricted stock unit.

2021 Awards Granted

During the year ended December 31, 2021, the Company granted certain key employees and non-employee directors 223,496 time-based restricted stock units under the MIP and LTIP with a weighted average grant date fair value of \$12.03 based on the Company's closing stock price at the trading day before the date of the grant. Awards granted to key employees will vest ratably over a three-year period from the date of the grant in accordance with the vesting schedule, subject to the participant's continuous service with the Company through each applicable vesting date. Restricted stock units were also granted to non-employee directors on February 10, 2021, which vested on April 30, 2021, and on May 1, 2021, which vested on April 30, 2022.

Additionally, during the year ended December 31, 2021, the Company granted certain key employees 167,587 performance-based restricted stock units under the LTIP, which represent the number of shares of common stock that may be issued based on the achievement of targeted performance levels related to pre-established relative total shareholder return goals and annually determined operational goals over a three year period. These awards are scheduled to cliff vest on the third anniversary of the date of the grant, subject to the participant's continuous service with the Company through the applicable vesting date and the satisfaction of the performance criteria. These performance-based restricted stock units have the potential to be earned from 0% to 200% of the targeted performance level, depending on actual results. Upon vesting and settlement of these awards, the Company will issue authorized and previously unissued shares of the Company's common stock to the recipient. The 100,552 operational performance-based restricted stock units were valued based on the Company's closing stock price on the trading day before the date of the grant and had a weighted average grant date fair value of \$12.00. For the awards with operational performance conditions, the Company reassesses at each reporting date whether achievement of each of the performance conditions was probable and adjusts the accrual of stock-based compensation expense as needed. The 67,035 relative total shareholder return performance-based restricted stock units were valued relative to the stock price

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

performance of a comparator group and had a weighted average grant date fair value of \$16.18 based on a Monte Carlo simulation. The Monte Carlo simulation incorporated the assumptions as presented in the following table:

<i>Relative performance-based restricted stock units</i>		
Start price ⁽¹⁾	\$	11.81
Valuation date stock price ⁽²⁾	\$	11.34
Expected volatility ⁽³⁾		98.54 %
Risk-free interest rate ⁽⁴⁾		0.18 %
Expected dividend yield ⁽⁵⁾		— %

- (1) The start price for the Company represented the average closing stock price over the twenty trading days ending on December 31, 2020, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.
- (2) The valuation date stock price represented the closing price on the grant date.
- (3) The expected volatility assumption was based on the historical volatility of the price of the Company's stock.
- (4) The annual risk-free interest rate equaled the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that had a term equal to the length of the remaining performance measurement period as of the valuation date.
- (5) The expected dividend yield represented the investments return to a share of the Company's stock that is not available to the holder of the performance-based restricted stock unit.

Additionally, during the year ended December 31, 2021, the Company granted certain key employees performance-based cash incentive awards under the LTIP with a target award amount of \$927. The cash to be awarded is based on the achievement of pre-established relative total shareholder return goals over a three-year period. These awards are scheduled to cliff vest on the third anniversary of the date of the grant, subject to the participant's continuous service with the Company through the applicable vesting date and the satisfaction of the performance criteria. These awards have the potential to be distributed from 0% to 200% of the targeted performance level, depending on actual results. Upon vesting of these awards, the Company issues cash to the recipient. These awards are classified as a liability, and the Company reassesses at each reporting date the fair value of the award and adjusts the accruals of stock-based compensation expense as appropriate based on a Monte Carlo simulation. As of December 31, 2023 and 2022, the liability for these awards totaled \$1,609 and \$812, respectively. The performance-based cash incentive awards were valued relative to the stock price performance of a comparator group and had a weighted average grant date fair value as a percent of target dollar value of 51.73% based on a Monte Carlo simulation. The Monte Carlo simulation incorporates the assumptions as presented in the following table:

<i>Performance-based cash incentive awards</i>		
Start price ⁽¹⁾	\$	11.81
Valuation date stock price ⁽²⁾	\$	11.34
Expected volatility ⁽³⁾		98.54 %
Risk-free interest rate ⁽⁴⁾		0.18 %
Expected dividend yield ⁽⁵⁾		— %

- (1) The start price for the Company represented the average closing stock price over the twenty trading days ending on December 31, 2020, assuming dividends distributed during this period were reinvested in additional shares of the Company's stock on the ex-dividend date.
- (2) The valuation date stock price represented the closing price on the grant date.
- (3) The expected volatility assumption was based on the historical volatility of the price of the Company's stock.
- (4) The annual risk-free interest rate equaled the yield on the semi-annual zero coupon U.S. Treasury rates converted to continuously compounded rates that had a term equal to the length of the remaining performance measurement period as of the valuation date.
- (5) The expected dividend yield represented the investments return to a share of the Company's stock that is not available to the holder of the performance-based restricted stock unit.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

Restricted Stock Units

Time-Based Restricted Stock Units

Time-based restricted stock unit activity for the year ended December 31, 2023 is summarized in the following table:

<i>Time-based restricted stock unit activity:</i>	Number of Shares	Weighted- Average Grant Date Fair Value
Non-vested shares outstanding at December 31, 2022	248,369	\$ 41.02
Granted	35,018	\$ 165.43
Vested ⁽¹⁾	(178,664)	\$ 54.50
Forfeited	(837)	\$ 149.38
Non-vested shares outstanding at December 31, 2023	<u>103,886</u>	<u>\$ 58.91</u>

⁽¹⁾ Includes 6,753 shares with deferred settlement pursuant to the award agreements.

As of December 31, 2023, there was \$2,011 of unrecognized compensation cost related to non-vested time-based restricted stock units which is expected to be recognized as expense over a weighted-average period of 1.45 years. The total fair value of shares vested, including awards with deferred settlements, during the years ended December 31, 2023, 2022, and 2021, was \$35,204, \$20,275, and \$5,544, respectively.

Performance-Based Restricted Stock Units

Relative performance-based restricted stock unit activity for the year ended December 31, 2023 based on target achievement of the performance criteria is summarized in the following table:

<i>Relative performance-based restricted stock unit activity:</i>	Number of Shares	Weighted- Average Grant Date Fair Value
Non-vested shares outstanding at December 31, 2022	91,377	\$ 37.80
Granted	19,885	\$ 257.06
Vested	(10,502)	\$ 106.82
Forfeited	(1,045)	\$ 167.08
Non-vested shares outstanding at December 31, 2023	<u>99,715</u>	<u>\$ 72.90</u>

As of December 31, 2023, there was \$3,809 of unrecognized compensation cost related to non-vested relative performance-based restricted stock units which is expected to be recognized as expense over a weighted-average period of 1.92 years. The total fair value of shares vested during the year ended December 31, 2023 was \$3,559.

Operational performance-based restricted stock unit activity for the year ended December 31, 2023 based on target achievement of the performance criteria is summarized in the following table:

<i>Operational performance-based restricted stock unit activity:</i>	Number of Shares	Weighted- Average Fair Value
Non-vested shares outstanding at December 31, 2022	137,067	\$ 24.89
Granted	29,816	\$ 171.07
Vested	(15,753)	\$ 74.61
Forfeited	(1,568)	\$ 150.24
Non-vested shares outstanding at December 31, 2023	<u>149,562</u>	<u>\$ 47.48</u>

As of December 31, 2023, there was \$1,446 of unrecognized compensation cost related to non-vested operational performance-based restricted stock units, based on the probability of achievement as of December 31, 2023, which is expected

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

to be recognized as expense over a weighted-average period of 1.70 years. The total fair value of shares vested during the year ended December 31, 2023 was \$5,339.

Stock Options

30-Day Volume-Weighted Average Price (“VWAP”) Stock Options

30-day VWAP stock option activity for the year ended December 31, 2023 is summarized in the following table:

	Number of Shares	Weighted- Average Exercise Price Per Share	Weighted- Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value ⁽¹⁾
Outstanding at December 31, 2022	3,407	\$ 66.13	4.18	\$ 273
Exercisable at December 31, 2022	3,407	\$ 66.13	4.18	\$ 273
Granted	—	\$ —		
Exercised	(3,407)	\$ 66.13		\$ 515
Forfeited or Expired	—	\$ —		
Outstanding at December 31, 2023	—	\$ —		\$ —
Exercisable at December 31, 2023	—	\$ —		\$ —

⁽¹⁾ The aggregate intrinsic value of outstanding and exercisable options is calculated as the difference between the exercise price and the Company’s stock price at each reporting period end. The aggregate intrinsic value of exercised options is calculated as the difference between the exercise price and the Company’s stock price on the exercise date.

As of December 31, 2023, there was no unrecognized compensation cost related to the 30-day VWAP stock options.

Performance-Based Cash Incentive Awards

Performance-based cash incentive award activity for the year ended December 31, 2023 based on target achievement of the performance criteria is summarized in the following table:

Performance-based cash incentive award activity:	Target Dollar Value	Weighted- Average Fair Value as a % of Target Dollar Value
Non-vested awards outstanding at December 31, 2022	\$ 3,958	166.29 %
Granted	—	— %
Vested	(2,054)	200.00 %
Forfeited	(28)	130.43 %
Non-vested awards outstanding at December 31, 2023	\$ 1,876	190.30 %

As of December 31, 2023, there was \$728 of unrecognized compensation cost related to non-vested performance-based cash incentive awards, based on the probability of achievement as of December 31, 2023, which is expected to be recognized as expense over a weighted-average period of 1.01 years.

(20) Related Party Transactions

There were no material related party transactions for the year ended December 31, 2023.

During the year ended December 31, 2021, the Company, through a privately negotiated transaction with an underlying Contingent Revenue Obligation creditor, repurchased 7.75% of the outstanding rights of the Contingent Revenue Obligation at an aggregate purchase price of \$2,091. The underlying Contingent Revenue Obligation creditor was an existing shareholder (related party) as of the repurchase date. Refer to Note 14 for additional disclosures on this acquisition-related obligation. Additionally, during the year ended December 31, 2021, the Company repurchased at a discount certain outstanding principal

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

borrowings made under the Term Loan Credit Facility from existing shareholders through privately negotiated transactions. Refer to Note 13 for additional disclosures on long-term debt.

(21) Commitments and Contingencies

(a) General

Estimated losses from loss contingencies are accrued by a charge to income when information available indicates that it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated.

If a loss contingency is not probable or reasonably estimable, disclosure of the loss contingency is made in the Consolidated Financial Statements when it is at least reasonably possible that a loss may be incurred and that the loss could be material.

(b) Commitments and Contingencies

Commitments

The Company leases coal mining and other equipment under long-term financing and operating leases with varying terms. Refer to Note 11 for further information on leases. In addition, the Company leases mineral interests and surface rights from landowners under various terms and royalty rates.

Coal royalty expense was \$185,398, \$226,366, and \$113,685 for the years ended December 31, 2023, 2022, and 2021, respectively.

Minimum royalty obligations under coal leases total \$14,357, \$14,394, \$13,160, \$11,901, \$11,851, and \$89,025 for 2024, 2025, 2026, 2027, 2028, and after 2028, respectively.

Other Commitments

As of December 31, 2023, the Company has obligations under certain coal purchase agreements that contain minimum quantities to be purchased in 2024 totaling an estimated \$236,848. The Company also has outstanding unconditional purchase obligations for 2024 and 2025 totaling \$251,038 and \$66,675, respectively, related to the purchase of equipment, diesel fuel, and electricity, as well as for rail freight and export terminal costs (including \$48,405 in 2024 for DTA funding.)

Under the terms of its partnership related agreements with respect to its investment in DTA, the Company is required to fund its proportionate share of DTA's ongoing operating and capital costs. In November 2023, the Company, together with DTA management announced that DTA needed additional capital investment to maximize functionality and minimize downtime due to mechanical issues. Beyond the Company's share of routine operating costs, it expects to invest up to an incremental \$25,000 per year for infrastructure and equipment upgrades at DTA over the next 6 years. The Company's 2024 funding of DTA includes routine operating and capital costs and infrastructure and equipment upgrades.

Contingencies

Extensive regulation of the impacts of mining on the environment and of maintaining workplace safety has had, and is expected to continue to have, a significant effect on the Company's costs of production and results of operations. Further regulations, legislation or litigation in these areas may also cause the Company's sales or profitability to decline by increasing costs or by hindering the Company's ability to continue mining at existing operations or to permit new operations.

During the normal course of business, contract-related matters arise between the Company and its customers. When a loss related to such matters is considered probable and can reasonably be estimated, the Company records a liability.

During the first half of 2023, the Company purchased and sold 399 tons, totaling \$15,170, under the Cumberland Back-to-Back Coal Supply Agreements. For the year ended December 31, 2022, the Company purchased and sold 1,617 tons, totaling \$62,171, under the Cumberland Back-to-Back Coal Supply Agreements. As of June 30, 2023, the Cumberland Back-to-Back Coal Supply Agreements had been fully performed.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

(c) Guarantees and Financial Instruments with Off-Balance Sheet Risk

In the normal course of business, the Company is a party to certain guarantees and financial instruments with off-balance sheet risk, such as bank LCs, performance or surety bonds, and other guarantees and indemnities related to the obligations of affiliated entities which are not reflected in the Company's Consolidated Balance Sheets. However, the underlying liabilities that they secure, such as asset retirement obligations, workers' compensation liabilities, and royalty obligations, are reflected in the Company's Consolidated Balance Sheets.

The Company is required to provide financial assurance in order to perform the post-mining reclamation required by its mining permits, pay workers' compensation claims under workers' compensation laws in various states, pay federal black lung benefits, and perform certain other obligations. In order to provide the required financial assurance, the Company generally uses surety bonds for post-mining reclamation and workers' compensation obligations. The Company can also use bank LCs to collateralize certain obligations.

As of December 31, 2023, the Company had \$31 of cash collateralized LCs remaining to be replaced as part of the transition from the previous ABL Facility to the New ABL Facility and \$60,896 in LCs outstanding under the New ABL Facility. During the first quarter of 2024, the remaining cash collateralized LCs from the previous ABL Facility were cancelled with no replacement required and the cash collateral was returned.

As of December 31, 2023, the Company had outstanding surety bonds with a total face amount of \$177,109 to secure various obligations and commitments. To secure the Company's reclamation-related obligations, the Company has \$33,858 of collateral in the form of restricted cash and restricted investments supporting these obligations as of December 31, 2023.

The Company meets frequently with its surety providers and has discussions with certain providers regarding the extent of and the terms of their participation in the program. These discussions may cause the Company to shift surety bonds between providers or to alter the terms of their participation in our program. To the extent that surety bonds become unavailable or the Company's surety bond providers require additional collateral, the Company would seek to secure its obligations with LCs, cash deposits or other suitable forms of collateral. The Company's failure to maintain, or inability to acquire, surety bonds or to provide a suitable alternative would have a material adverse effect on its liquidity. These failures could result from a variety of factors including lack of availability, higher cost or unfavorable market terms of new surety bonds, and the exercise by third-party surety bond issuers of their right to refuse to renew the surety.

Amounts included in restricted cash provide collateral to secure the following obligations:

	December 31,	
	2023	2022
Workers' compensation and black lung obligations	\$ 104,998	\$ 15,334
Reclamation-related obligations	685	3,220
Financial payments and other performance obligations	10,235	10,387
Contingent Revenue Obligation escrow	—	24,547
Total restricted cash	\$ 115,918	\$ 53,488
Less current portion	—	(24,547)
Restricted cash, net of current portion	\$ 115,918	\$ 28,941

Amounts included in restricted investments provide collateral to secure the following obligations:

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

	December 31,	
	2023	2022
Workers' compensation and black lung obligations	\$ 2,514	\$ 72,136
Reclamation-related obligations	33,173	31,718
Financial payments and other performance obligations	4,910	1,881
Total restricted investments ⁽¹⁾	\$ 40,597	\$ 105,735

⁽¹⁾ Classified as long-term trading securities as of December 31, 2023 and 2022.

Amounts included in deposits provide collateral to secure the following obligations:

	December 31,	
	2023	2022
Workers' compensation obligations	\$ 4,500	\$ —
Reclamation-related obligations	—	102
Financial payments and other performance obligations	32	391
Other operating agreements	850	85,618
Total deposits	\$ 5,382	\$ 86,111
Less current portion	(32)	(84,748)
Total deposits, net of current portion ⁽¹⁾	\$ 5,350	\$ 1,363

⁽¹⁾ Included within Other non-current assets on the Company's Consolidated Balance Sheets.

DCMWC Reauthorization Process

In July 2019, the U.S. Department of Labor (Division of Coal Mine Workers' Compensation or "DCMWC") began implementing a new authorization process for all self-insured coal mine operators. As requested by the DCMWC, the Company filed an application and supporting documentation for reauthorization to self-insure certain of its black lung obligations in October 2019. As a result of this application, the DCMWC notified the Company in a letter dated February 21, 2020 that the Company was reauthorized to self-insure certain of its black lung obligations for a period of one-year from February 21, 2020. The DCMWC reauthorization was contingent, however, upon the Company's providing collateral of \$65,700 to secure certain of its black lung obligations. This proposed collateral requirement would have been an increase from the approximate \$2,600 in collateral that the Company currently provides to secure these self-insured black lung obligations. The reauthorization process provided the Company with the right to appeal the security determination in writing within 30 days of the date of the notification, which appeal period the DCMWC agreed to extend to May 22, 2020. The Company exercised this right of appeal in connection with the substantial increase in the amount of required collateral. In February 2021, the U.S. Department of Labor ("DOL") withdrew its Federal Register notice seeking comments on its bulletin describing its new method of calculating collateral requirements. The DOL removed the bulletin from its website in May 2021. On February 10, 2022, a telephone conference was held with DCMWC and DOL decision makers wherein the Company presented facts and arguments in support of its appeal. No ruling has been made on the appeal, but during the call the Company indicated that it would be willing to allocate an additional \$10,000 in collateral. If the Company's appeal is unsuccessful, the Company may be required to provide additional LCs to receive the self-insurance reauthorization from the DCMWC or alternatively insure these black lung obligations through a third-party provider that would likely also require the Company to provide additional collateral. In January 2023, the DOL proposed for public comment new regulations which, if adopted, would substantially increase the collateral required to secure self-insured federal black lung obligations. Under the proposed 120% minimum collateral requirement, the Company estimates it could be required to provide approximately \$80,000 to \$100,000 of collateral to secure certain of its black lung obligations. The DOL has indicated that it expects that some form of these new regulations could go into effect in the first quarter or early second quarter of 2024. A significant increase in these collateral obligations could have a materially adverse effect on the Company's liquidity.

(d) Legal Proceedings

Litigation has been initiated against certain of our subsidiaries in which the plaintiffs allege violations of the Fair Labor Standards Act due to alleged failure to compensate for time "donning" and "doffing" equipment and to account for the effects in the calculation of overtime rates and pay. The plaintiffs seek collective action certification. We cannot reasonably estimate a

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

range of potential exposure at this time. We believe the plaintiffs' claims are without merit, but if we were ultimately unsuccessful in defending against this litigation, it could have a material, adverse effect upon our liquidity and results of operations.

In addition, the Company is party to other legal proceedings from time to time. These proceedings, as well as governmental examinations, could involve various business units and a variety of claims including, but not limited to, contract disputes, personal injury claims, property damage claims (including those resulting from blasting, trucking and flooding), environmental and safety issues, securities-related matters and employment matters. While some legal matters may specify the damages claimed by the plaintiffs, many seek an unquantified amount of damages. Even when the amount of damages claimed against the Company or its subsidiaries is stated, (i) the claimed amount may be exaggerated or unsupported; (ii) the claim may be based on a novel legal theory or involve a large number of parties; (iii) there may be uncertainty as to the likelihood of a class being certified or the ultimate size of the class; (iv) there may be uncertainty as to the outcome of pending appeals or motions; and/or (v) there may be significant factual issues to be resolved. As a result, if such legal matters arise in the future, the Company may be unable to estimate a range of possible loss for matters that have not yet progressed sufficiently through discovery and development of important factual information and legal issues. The Company records accruals based on an estimate of the ultimate outcome of these matters, but these estimates can be difficult to determine and involve significant judgment.

(22) Concentration of Credit Risk and Major Customers

The Company markets produced, processed, and purchased coal to customers in the United States and in international markets. The following table presents additional information on our total revenues and top customers:

	Year Ended December 31,		
	2023	2022	2021
Total coal revenues	\$ 3,456,630	\$ 4,092,987	\$ 2,252,624
Total revenues	3,471,417	4,101,592	2,258,686
Export coal revenues	2,539,068	3,303,477	1,706,026
Top customer as % of total revenues	13 %	25 %	13 %
Top 10 customers as % of total revenues	74 %	70 %	64 %
Number of customers exceeding 10% of total revenues	2	1	2
Number of customers exceeding 10% of total trade accounts receivable, net	3	2	3
Domestic coal revenue as % of total coal revenues	26 %	19 %	24 %
Export coal revenue as % of total coal revenues	74 %	81 %	76 %
Countries with export coal revenue exceeding 10% of total revenues	India	India	India, China, Brazil
Met coal as % of coal sales volume	90 %	87 %	83 %
Thermal coal as % of coal sales volume	10 %	13 %	17 %

(23) Segment Information

The Company extracts, processes and markets met and thermal coal from deep and surface mines for sale to steel and coke producers, industrial customers, and electric utilities. The Company conducts mining operations only in the United States with mines in Central Appalachia. The Company has one reportable segment: Met, which consists of five active mines and two preparation plants in Virginia, seventeen active mines and six preparation plants in West Virginia, as well as expenses associated with certain idled/closed mines.

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES**Notes to Consolidated Financial Statements****(Amounts in thousands except share and per share data)**

In addition to the one reportable segment, the All Other category includes general corporate overhead and corporate assets and liabilities, the former CAPP - Thermal operations consisting of one preparation plant in West Virginia, and the elimination of certain intercompany activity, as well as expenses associated with certain idled/closed mines.

Reportable segment operating results are regularly reviewed by the Chief Operating Decision Maker (“CODM”), who is the Chief Executive Officer of the Company.

Segment operating results and capital expenditures for the year ended December 31, 2023 were as follows:

	Year Ended December 31, 2023		
	Met	All Other	Consolidated
Total revenues	\$ 3,417,395	\$ 54,022	\$ 3,471,417
Depreciation, depletion, and amortization	\$ 125,716	\$ 11,153	\$ 136,869
Amortization of acquired intangibles, net	\$ 8,523	\$ —	\$ 8,523
Adjusted EBITDA	\$ 1,087,803	\$ (54,692)	\$ 1,033,111
Capital expenditures	\$ 238,916	\$ 6,457	\$ 245,373

Segment operating results and capital expenditures for the year ended December 31, 2022 were as follows:

	Year Ended December 31, 2022		
	Met	All Other	Consolidated
Total revenues	\$ 4,023,688	\$ 77,904	\$ 4,101,592
Depreciation, depletion, and amortization	\$ 100,584	\$ 7,036	\$ 107,620
Amortization of acquired intangibles, net	\$ 15,699	\$ 3,799	\$ 19,498
Adjusted EBITDA	\$ 1,776,642	\$ (36,030)	\$ 1,740,612
Capital expenditures	\$ 160,679	\$ 3,630	\$ 164,309

Segment operating results and capital expenditures for the year ended December 31, 2021 were as follows:

	Year Ended December 31, 2021		
	Met	All Other	Consolidated
Total revenues	\$ 2,176,080	\$ 82,606	\$ 2,258,686
Depreciation, depletion, and amortization	\$ 99,963	\$ 10,084	\$ 110,047
Amortization of acquired intangibles, net	\$ 13,671	\$ (427)	\$ 13,244
Adjusted EBITDA	\$ 567,270	\$ (32,789)	\$ 534,481
Capital expenditures	\$ 79,185	\$ 4,115	\$ 83,300

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

The following table presents a reconciliation of net income (loss) to Adjusted EBITDA for the year ended December 31, 2023:

	Year Ended December 31, 2023		
	Met	All Other	Consolidated
Net income (loss)	\$ 938,495	\$ (216,539)	\$ 721,956
Interest expense	731	6,192	6,923
Interest income	(644)	(11,289)	(11,933)
Income tax expense	—	123,503	123,503
Depreciation, depletion and amortization	125,716	11,153	136,869
Non-cash stock compensation expense	96	18,921	19,017
Loss on extinguishment of debt	—	2,753	2,753
Accretion on asset retirement obligations	14,886	10,614	25,500
Amortization of acquired intangibles, net	8,523	—	8,523
Adjusted EBITDA	<u>\$ 1,087,803</u>	<u>\$ (54,692)</u>	<u>\$ 1,033,111</u>

The following table presents a reconciliation of net income (loss) to Adjusted EBITDA for the year ended December 31, 2022:

	Year Ended December 31, 2022		
	Met	All Other	Consolidated
Net income (loss)	\$ 1,647,104	\$ (198,559)	\$ 1,448,545
Interest expense	202	21,600	21,802
Interest income	(541)	(2,646)	(3,187)
Income tax expense	—	106,205	106,205
Depreciation, depletion and amortization	100,584	7,036	107,620
Non-cash stock compensation expense	4	7,480	7,484
Mark-to-market adjustment - acquisition-related obligations	—	8,880	8,880
Accretion on asset retirement obligations	13,590	10,175	23,765
Amortization of acquired intangibles, net	15,699	3,799	19,498
Adjusted EBITDA	<u>\$ 1,776,642</u>	<u>\$ (36,030)</u>	<u>\$ 1,740,612</u>

ALPHA METALLURGICAL RESOURCES, INC. AND SUBSIDIARIES
Notes to Consolidated Financial Statements
(Amounts in thousands except share and per share data)

The following table presents a reconciliation of net income (loss) to Adjusted EBITDA for the year ended December 31, 2021:

	Year Ended December 31, 2021		
	Met	All Other	Consolidated
Net income (loss)	\$ 439,859	\$ (151,069)	\$ 288,790
Interest expense	184	69,470	69,654
Interest income	(6)	(330)	(336)
Income tax expense	—	3,408	3,408
Depreciation, depletion and amortization	99,963	10,084	110,047
Non-cash stock compensation expense	28	5,287	5,315
Mark-to-market adjustment - acquisition-related obligations	—	19,525	19,525
Gain on settlement of acquisition-related obligations	—	(1,125)	(1,125)
Accretion on asset retirement obligations	13,571	12,949	26,520
Asset impairment and restructuring	—	(561)	(561)
Amortization of acquired intangibles, net	13,671	(427)	13,244
Adjusted EBITDA	<u>\$ 567,270</u>	<u>\$ (32,789)</u>	<u>\$ 534,481</u>

No asset information has been disclosed as the CODM does not regularly review asset information by reportable segment.

Item 9. *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A. *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

We maintain disclosure controls and procedures as that term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) that are designed 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 the SEC’s rules and forms, and that such information is accumulated and communicated to our management, including our CEO and our Chief Financial Officer (“CFO”), as appropriate, to allow timely decisions regarding required disclosures. In accordance with Rule 13a-15(b) of the Exchange Act, we have evaluated, under the supervision of our CEO and our CFO, the effectiveness of disclosure controls and procedures as of December 31, 2023. Based on this evaluation, our CEO and our CFO concluded that our disclosure controls and procedures were effective as of December 31, 2023.

Management’s Report on Internal Control Over Financial Reporting

Management is responsible for maintaining and establishing adequate internal control over financial reporting. An evaluation of the effectiveness of the design and operation of our internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, as of the end of the period covered by this report was performed under the supervision and with the participation of management, including our CEO and CFO under the oversight of the Audit Committee of the Board. This evaluation is performed to determine if our internal controls over financial reporting 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.

Management conducted an assessment of the effectiveness of our internal control over financial reporting using the criteria set by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework (2013). Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2023.

Our CEO, CFO, and other members of management do not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. 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.

Our independent registered public accounting firm, RSM US LLP, has audited the effectiveness of our internal control over financial reporting, as stated in their attestation report included in this annual report on Form 10-K.

Changes in Internal Control Over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Exchange Act) that occurred during the period covered by this Annual Report on Form 10-K that have materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. *Other Information*

During the quarter ended December 31, 2023, no director or officer adopted or terminated: (i) any contract, instruction or written plan for the purchase or sale of securities of the Company intended to satisfy the affirmative defense conditions of Rule 10b5-1(c); or (ii) any “non-Rule 10b5-1 trading arrangement” as defined in paragraph (c) of item 408(a) of Regulation S-K.

Item 9C. *Disclosure Regarding Foreign Jurisdictions that Prevent Inspections*

Not applicable.

Part III

Item 10. *Directors, Executive Officers and Corporate Governance*

The sections of our Proxy Statement entitled “Proposal 1 - Election of Directors,” “About our Board of Directors - Board and Its Committees,” “About our Board of Directors - Board Committees - Audit Committee,” “About our Management Team,” “Delinquent Section 16(a) Reports,” “About our Board of Directors - Code of Business Ethics” and “Stockholder Proposals for the 2025 Annual Meeting” are incorporated herein by reference.

The Company has a written Code of Business Ethics that applies to the Company’s Chief Executive Officer (Principal Executive Officer), Chief Financial Officer (Principal Financial and Accounting Officer) and others. The Code of Business Ethics is available on the Company’s website at investors.alphametresources.com/investors/corporate-governance/governance-documents. Any amendments to, or waivers from, a provision of our Code of Business Ethics that applies to our Principal Executive Officer, Principal Financial and Accounting Officer or persons performing similar functions 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 on our website. Information on or accessible through our website is not incorporated by reference into this Annual Report on Form 10-K.

The Company has adopted an insider securities trading policy that prohibits directors, officers, employees, temporary employees, independent consultants and contractors of the Company from engaging in hedging transactions involving Company securities such as short selling, buying or selling publicly traded options (including puts and calls), zero-cost collar and forward sales contracts. The policy also prohibits the holding by these persons of Alpha securities in a margin account or pledging Alpha securities as collateral for a loan.

Item 11. *Executive Compensation*

Information required by this item is incorporated herein by reference to the sections of our proxy statement for the 2024 annual meeting of stockholders entitled “About our Board of Directors - Director Compensation,” “Board Committee Reports - Compensation Committee Report” and “Executive Compensation.” These sections include, but are not limited to, “About our Board of Directors - Director Compensation - 2023 Director Compensation,” “Executive Compensation - Compensation Discussion and Analysis,” “Board Committee Reports - Compensation Committee Report,” “Executive Compensation - Compensation Discussion and Analysis - Risk Assessment of Compensation Programs,” “Executive Compensation - 2023 Summary Compensation Table,” “Executive Compensation – 2023 Grants of Plan-Based Awards,” “Executive Compensation - Outstanding Equity Awards at 2023 Fiscal Year End,” “Executive Compensation - Option Exercises and Stock Vested in 2023,” “Executive Compensation - Nonqualified Deferred Compensation,” “Executive Compensation - Potential Payments on Termination or Change in Control,” “Pay Ratio,” and “Executive Compensation - Pay Versus Performance.”

Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*

The sections of our Proxy Statement entitled “Security Ownership of Certain Beneficial Owners and Management” and “Executive Compensation – Potential Payments on Termination and Change in Control - Equity Compensation Plan Information” are incorporated herein by reference.

Item 13. *Certain Relationships and Related Transactions, and Director Independence*

The sections of our Proxy Statement entitled “About our Board of Directors - Independent and Non-Management Directors” and “Other Information - Review and Approval of Transactions With Related Persons” are incorporated herein by reference.

Item 14. *Principal Accountant Fees and Services*

The sections of our Proxy Statement entitled “Proposal 3 - Ratification of Appointment of Independent Registered Public Accounting Firm - Independent Registered Public Accounting Firm and Fees” and “Proposal 3 - Ratification of Appointment of Independent Registered Public Accounting Firm - Policy for Approval of Audit and Permitted Non-Audit Services” are incorporated herein by reference.

Additional Information

We file annual, quarterly and current reports, proxy statements and other information with the Securities and Exchange Commission (“SEC”). You may access and read our SEC filings through our website, at www.alphametresources.com, or the SEC’s website, at www.sec.gov. You may also request copies of our filings, at no cost, by telephone at (423) 573-0300 or by mail at: Alpha Metallurgical Resources, Inc., P.O. Box 848, Bristol, TN 37621, attention: Investor Relations. Our Audit Committee Charter, Compensation Committee Charter, Nominating and Corporate Governance Committee Charter, Corporate Governance Practices and Policies, and Code of Business Ethics are also available on our website and available in print to any stockholder who requests them. Information on or accessible through our website is not incorporated by reference into this Annual Report on Form 10-K.

Part IV

Item 15. *Exhibit and Financial Statement Schedules*

Pursuant to the rules and regulations of the Securities and Exchange Commission, the Company has filed certain agreements as exhibits to this Annual Report on Form 10-K. These agreements may contain representations and warranties by the parties. These warranties have been made solely for the benefit of the other party or parties to such agreements and (i) may have been qualified by disclosure made to such other party or parties, (ii) were made only as of the date of such agreements or such other date(s) as may be specified in such agreements and are subject to more recent developments, which may not be fully reflected in such Company’s public disclosure, (iii) may reflect the allocation of risk among the parties to such agreements and (iv) may apply materiality standards different from what may be viewed as material to investors. Accordingly, these representations and warranties may not describe the Company’s actual state of affairs at the date hereof and should not be relied upon.

(a) Documents filed as part of this Annual Report on Form 10-K:

(1) *The following financial statements are filed as part of this Annual Report on Form 10-K under Item 8-Financial Statements and Supplementary Data:*

- Report of Independent Registered Public Accounting Firm
- Consolidated Statements of Operations, Years ended December 31, 2023, 2022, and 2021
- Consolidated Statements of Comprehensive Income, Years ended December 31, 2023, 2022, and 2021
- Consolidated Balance Sheets, December 31, 2023 and 2022
- Consolidated Statements of Cash Flows, Years ended December 31, 2023, 2022, and 2021
- Consolidated Statements of Stockholders’ Equity, Years ended December 31, 2023, 2022, and 2021
- Notes to Consolidated Financial Statements

(2) *Financial Statement Schedules.* All schedules are omitted because they are not required or because the information is immaterial or provided elsewhere in the Consolidated Financial Statements and Notes thereto.

(3) *Listing of Exhibits.* See the Exhibit Index following the signature page to this Annual Report on Form 10-K.

Exhibit Index

Exhibit No.	Description of Exhibit
3.1*	Second Amended and Restated Certificate of Incorporation of Alpha Metallurgical Resources, Inc., as amended through January 22, 2021 (Incorporated by reference to Exhibit 3.1 on Form 10-Q of Alpha Metallurgical Resources, Inc. filed on November 5, 2021)
3.2*	Fourth Amended and Restated Bylaws of Alpha Metallurgical Resources, Inc. (Incorporated by reference to Exhibit 3.1 on Form 8-K of Alpha Metallurgical Resources, Inc. filed on December 2, 2022)
4.1	Description of Securities Registered Pursuant to Section 12 of the Securities Exchange Act of 1934
10.1*†	Contura Energy, Inc. Management Incentive Plan, effective as of July 26, 2016. (Incorporated by reference to Exhibit 10.36 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.2*†	Amendment 1 to Contura Energy, Inc. Management Incentive Plan, dated as of January 18, 2017. (Incorporated by reference to Exhibit 10.37 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.3*†	Contura Energy, Inc. Deferred Compensation Plan. (Incorporated by reference to Exhibit 10.41 to the Registration Statement on Form S-4/A of Contura Energy, Inc. (File No. 333-226953) filed on August 21, 2018)
10.4*†	Alpha Metallurgical Resources, Inc. Annual Incentive Bonus Program. (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Alpha Metallurgical Resources, Inc. (File No. 001-38735) filed on May 9, 2022)
10.5*†	Form of Indemnification Agreement by and between Contura Energy, Inc. and each of its current and future directors and officers. (Incorporated by reference to Exhibit 10.2 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.6†	Alpha Metallurgical Resources, Inc. Amended and Restated Non-Employee Director Compensation Policy, as amended
10.7*†	Contura Energy, Inc. Form of Non-Employee Director Restricted Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.8 to the Current Report on Form 8-K of Contura Energy, Inc. filed on November 13, 2018)
10.8*	Credit Agreement, dated as of June 14, 2019, by and among Contura Energy, Inc., as the Borrower, Cantor Fitzgerald Securities, as Administrative Agent and certain lenders party thereto (Incorporated by reference to Exhibit 10.1 to the Current Report on Form 8-K of Contura Energy, Inc. filed on June 18, 2019)
10.9*†	Plan Document and Summary Plan Description of the Amended and Restated Contura Energy, Inc. Key Employee Separation Plan (Incorporated by reference to Exhibit 10.1 on Form 10-Q of Contura Energy, Inc. filed on November 9, 2020)
10.10*†	Form of 2018 Long-Term Incentive Plan, as restated to give effect to Amendment No.1. (Incorporated by reference to Exhibit 99.1 to the Registration Statement on Form S-8 of Alpha Metallurgical Resources, Inc. (File No. 333-257563) filed on June 30, 2021)
10.11*†	Employment Agreement, dated November 18, 2022, by and between Alpha Metallurgical Resources, Inc. and C. Andrew Eidson (Incorporated by reference to Exhibit 10.1 on Form 8-K of Alpha Metallurgical Resources, Inc. filed on November 21, 2022)
10.12*†	Transition Agreement, dated November 18, 2022, by and between Alpha Metallurgical Resources, Inc. and David J. Stetson (Incorporated by reference to Exhibit 10.2 on Form 8-K of Alpha Metallurgical Resources, Inc. filed on November 21, 2022)
10.13*†	Form of Restricted Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.24 of Form 10-K of Alpha Metallurgical Resources, Inc. filed on February 23, 2023)
10.14*†	Form of Performance Stock Unit Award Agreement (Incorporated by reference to Exhibit 10.25 of Form 10-K of Alpha Metallurgical Resources, Inc. filed on February 23, 2023)
10.15*	Credit Agreement, dated as of October 27, 2023, by and among Alpha Metallurgical Resources, Inc. and certain of its Subsidiaries, as borrowers, the Guarantors party thereto, Regions Capital Markets, a division of Regions Bank, as Book Runner and Lead Arranger, ServisFirst Bank and Texas Capital Bank, as Joint Book Runners and Joint Lead Arrangers, the other Lenders from time to time party thereto, and Regions Bank, as administrative agent, collateral agent, swingline lender and LC issuer (Incorporated by reference to Exhibit 10.1 of Form 10-Q of Alpha Metallurgical Resources, Inc. filed on November 2, 2023)
10.16†	Form of Restricted Stock Unit Award Agreement
10.17†	Form of Performance Stock Unit Award Agreement
19	Alpha Metallurgical Resources, Inc Insider Trading and Information Disclosure Policy
21.1	List of Subsidiaries of Alpha Metallurgical Resources, Inc.

23.1	Consent of RSM US LLP
23.2	Consent of Marshall Miller & Associates, Inc. dated February 26, 2024
31	Certifications Pursuant to Rule 13a-14(a) under the Securities Exchange Act of 1934, as adopted pursuant to §302 of the Sarbanes-Oxley Act of 2002
32	Certifications Pursuant to 18 U.S.C. §1350, As Adopted Pursuant to §906 of the Sarbanes-Oxley Act of 2002
95	Mine Safety Disclosure
96.1	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Aracoma Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
96.2	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Kepler Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
96.3	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Kingston Mining Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
96.4	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Marfork Mining Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
96.5	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Virginia Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, Virginia, USA, February 2024
96.6	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources and Reserves for the Elk Run Underground Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
96.7	Technical Report Summary - Alpha Metallurgical Resources, Inc. Statement of Coal Resources for the Power Mountain Underground Complex in Accordance with United States SEC Standards as of December 31, 2023, Central Appalachian Coal Basin, West Virginia, USA, February 2024
97†	Alpha Metallurgical Resources, Inc. Amended And Restated Executive Officer Incentive Compensation Recoupment (Clawback) Policy
101	The following financial information from Alpha Metallurgical Resources, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2023 formatted in Inline XBRL (Extensible Business Reporting Language) includes: (i) Consolidated Statements of Operations, (ii) Consolidated Statements of Comprehensive Income, (iii) Consolidated Balance Sheets, (iv) Consolidated Statements of Cash Flows, (v) Consolidated Statements of Stockholders' Equity, and (vi) Notes to the Consolidated Financial Statements.
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Previously filed. † Management contract, compensatory plan or arrangement.

Item 16. *Form 10-K Summary*

None.

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.

ALPHA METALLURGICAL RESOURCES, INC.

Date: February 26, 2024

By: /s/ J. Todd Munsey

Name: J. Todd Munsey

Title: Chief Financial Officer
(Principal Financial Officer and Principal Accounting Officer)

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints J. Todd Munsey his true and lawful attorney-in-fact, each with full power of substitution, for him in any and all capacities, to sign any amendments to this Annual Report on Form 10-K and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact or his substitute or substitutes may do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Date	Title
<u>/s/ Charles Andrew Eidson</u> Charles Andrew Eidson	February 26, 2024	Chief Executive Officer (Principal Executive Officer)
<u>/s/ J. Todd Munsey</u> J. Todd Munsey	February 26, 2024	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)
<u>/s/ David J. Stetson</u> David J. Stetson	February 26, 2024	Chairman
<u>/s/ Joanna Baker de Neufville</u> Joanna Baker de Neufville	February 26, 2024	Director
<u>/s/ Kenneth S. Courtis</u> Kenneth S. Courtis	February 26, 2024	Director
<u>/s/ Albert E. Ferrara, Jr.</u> Albert E. Ferrara, Jr.	February 26, 2024	Director
<u>/s/ Elizabeth A. Fessenden</u> Elizabeth A. Fessenden	February 26, 2024	Director
<u>/s/ Michael Gorzynski</u> Michael Gorzynski	February 26, 2024	Director
<u>/s/ Michael J. Quillen</u> Michael J. Quillen	February 26, 2024	Lead Independent Director
<u>/s/ Daniel D. Smith</u> Daniel D. Smith	February 26, 2024	Director

